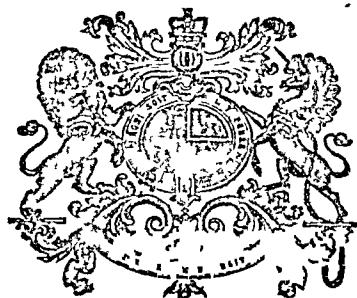




ADMINISTRATION REPORT
ON THE
RAILWAYS IN INDIA
FOR THE
CALENDAR YEAR 1905
BY
THE RAILWAY BOARD.



Dated the 23rd May 1906

SIMLA
PRINTED AT THE GOVERNMENT CENTRAL PRINTING OFFICE.

1906.

Price Two Rupees, or 2s 8d.

Agents for the sale of books published by the Superintendent of Government Printing, India, Calcutta

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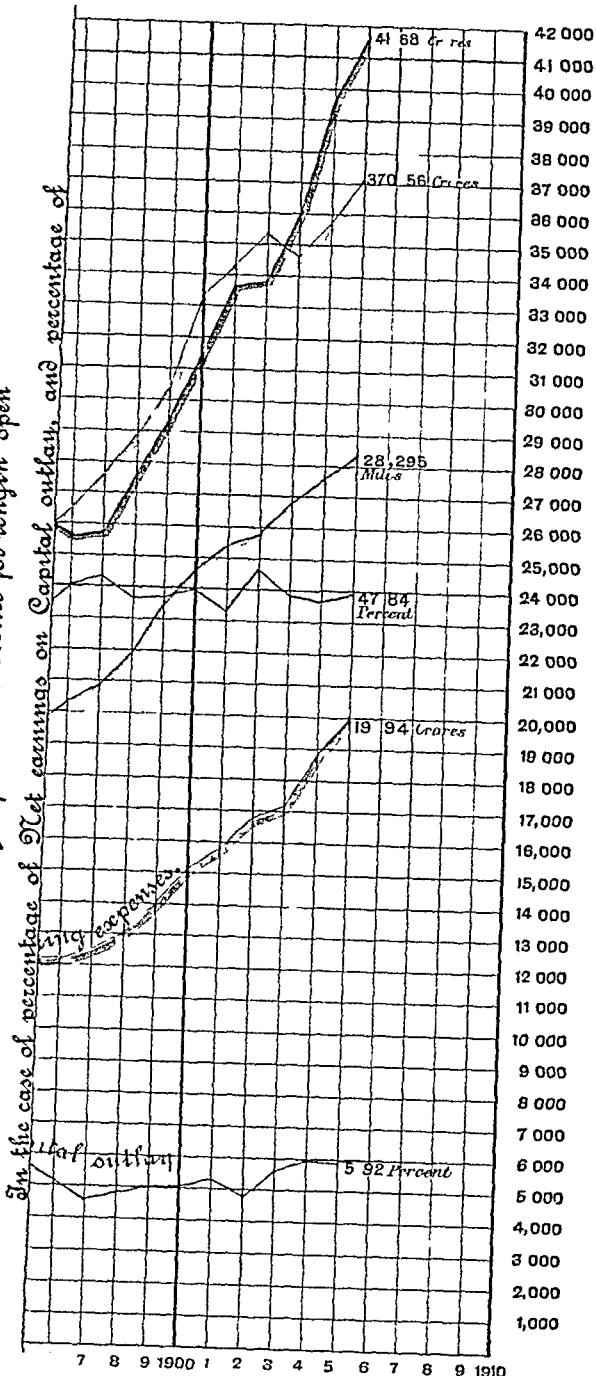
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The figures on this scale represent factors for the Capital outlay, tens of thousands,
for Gross earnings and Working expenses and Miles for length open



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ADMINISTRATION REPORT
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THE CALENDAR YEAR 1905.

General

The Railway Board have in this report re-introduced, with certain modifications, Appendix 12, showing the general results of working each railway system, which last appeared in the report for 1903. Appendix 33—History of open lines, and of lines under construction or sanctioned for commencement, has been curtailed, certain details of no particular interest having been omitted.

Mileage

2 During the year 1905, 749 miles of line were opened to traffic, bringing the total mileage open up to 28,295 miles of the following gauges—

15,028	of 5' 6"	gauge (standard).
11,959	„ 3' 3½"	„ (metre).
980	„ 2' 6"	„ } (special)
328	„ 2' 0"	„ }
<hr/>		
<hr/> 28,295		

There were 627 miles of line sanctioned during the year—

371	of 5' 6"	gauge (standard)
139	„ 3' 3½"	„ (metre)
117	„ 2' 6"	„ } (special).
..	„ 2' 0"	„ }
<hr/> 627		

Up to the latest date of returns (end of April 1906) the mileages are—

Lines open	28,617
Lines under construction and sanctioned	3,297

Capital

3 The Capital outlay from the commencement on open lines and lines partly open amounted at the close of the calendar year 1905 to Rs 36,693 94 lakhs, and that on lines wholly under construction to Rs 267 22 lakhs. In addition Rs 95 17 lakhs were incurred on miscellaneous items (English stores, etc) connected with railways. The total outlay amounted to Rs. 37,056 33

4 All sanctions for expenditure are given with reference to the official year, and the sum of Rs 1,500 lakhs (£ 10,000,000), being an increase of 20 per cent on the previous year, has been provided for 1906-1907 divided as under—

	Rs Lakhs
(a) For open lines, including Rs 382 lakhs for rolling-stock	891 09
(b) For lines already under construction—	
(i) begun prior to 1905-1906	380 54
(ii) begun during 1905-1906	158 87
(c) For lines to be begun in 1906-1907	70 00
<hr/>	
TOTAL	15,00 00

Rolling stock and safety appliances

5 In 1905, 256 engines, 370 coaches and 2,861 wagons were added to the rolling-stock of the railways, and there are under supply 511 engines, 2,223 coaches and 6,700 wagons.

Subsequent to the 31st December 1905 the provision of 47 engines, 75 coaches and 2,218 wagons has, in addition, been authorized.

6 Three hundred and eighty-six engines, 800 coaches and 915 wagons were fitted with automatic brakes, bringing the number so fitted at the close of the year up to 3,016 engines, 11,201 coaches and 3,798 wagons, as against 2,799 engines, 9,061 coaches and 107,226 wagons not fitted.

7. Five hundred and sixty vehicles were fitted with gas and electricity, making the total number so fitted at the close of the year 10,430, as compared with 7,105 not fitted. The number fitted with gas was 9,782 and with electricity 618.

8 Means of communication between passengers, guards and drivers are fitted to many fast trains, both State and Company, and their more extended use is being pressed on all lines.

9 One hundred and eighty stations were fitted with apparatus for interlocking points and signals. The progress in the introduction of automatic instruments for signalling trains between stations continues, 79 stations having been provided with these instruments.

Statistical results of working

10. With an addition of 719 miles to the open mileage, the gross earnings of all Indian railways during the calendar year 1905 amounted in round figures to Rs 4,168.09 lakhs, compared with Rs 3,951.97 lakhs in 1904, an increase of Rs 203.12 lakhs. Of the increase in the gross earnings, Rs 116.50 lakhs were absorbed in additional working expenses. The net earnings amounted to Rs 2,171.09 lakhs, against Rs 2,087.17 lakhs in 1904, or an increase of Rs 86.62 lakhs. These net earnings yielded a return on the Capital outlay (Rs 36,693.91 lakhs) on open lines and lines partly open of nearly 6 per cent, about the same as that yielded in 1904.

Of the increase of Rs 203.12 lakhs in the gross receipts, the Bengal-Nagpur railway earned Rs 55.59 lakhs or 27 per cent, the Rajputana-Malwa railway Rs 51.91 lakhs or 26 per cent, and the remainder was contributed principally by the Great Indian Peninsula, Bombay, Baroda and Central India and Madras railways.

The development of passenger traffic, noticed in the last report, continued during the year under review, and a larger number of pilgrims, native marriage parties, visitors to fairs, etc., were carried by railway. The visit to India of Their Royal Highnesses the Prince and Princess of Wales also contributed to this development. The total number carried was 218.16 millions against 227.10 millions, and the earnings therefrom Rs 1,273.83 lakhs against Rs 1,176.20 lakhs. The number of third class passengers carried was more by 18.76 millions and the earnings therefrom by Rs 79.13 lakhs. The other classes also showed satisfactory increases. Of the increase of Rs 97.63 lakhs in the passenger receipts, the North Western (State) railway earned Rs 19.99 lakhs or 20 per cent, and the remainder was contributed principally by the Great Indian Peninsula, Rajputana-Malwa, Bengal-Nagpur and Bombay, Baroda and Central India railways.

The average rate charged to passengers of all classes was 2.17 pces per mile just over $\frac{1}{5}$ th of a penny, and the average distance travelled was about 40 miles. There have been no material fluctuations in these figures since 1881.

The aggregate tonnage of goods listed during the year 1905 and the earnings therefrom were 54.91 million tons and Rs 2,620.71 lakhs, respectively, an improvement over the previous year of 2.89 million tons and Rs 101.90 lakhs. Of the increase in the goods receipts the Bengal-Nagpur railway earned Rs 47.02 lakhs or 46 per cent, the Rajputana-Malwa railway earned Rs 38.17 lakhs or 38 per cent, and the remainder was contributed principally by the Great Indian Peninsula, Madras, and Bombay, Baroda and Central India railways.

The total weight of the traffic in "Grain and pulse", "Cotton, raw and manufactured", "Coal", "Oil-seeds", "Sugar", "Salt", and "Jute" during the year

1905 amounted to 28 78 million tons and the earnings therefrom to Rs 1,712 68 lakhs, against 27 77 million tons and Rs 1,689 81 lakhs, respectively, in the previous year. The traffic in these commodities amounted during the year 1905 to 70 63 per cent in weight and 70 13 per cent in earnings of the total traffic carried for the public, against 71 37 per cent and 71 58 per cent, respectively, in the previous year.

There was a large increase of 1 61 million tons and Rs 101 06 lakhs in the grain and pulse (other than wheat) traffic, attributable chiefly to the larger movements of grains owing to scarcity prevailing in Southern India and Raiputana. There was also an increase of 244 81 thousand tons and Rs 53 68 lakhs under cotton, due to good crops. There was, however, a falling off of 1 07 million tons and Rs 114 28 lakhs in the wheat traffic, and of 199 50 thousand tons and 19 17 lakhs in the rape and mustard seed traffic, due to the partial failure of crops up-country in consequence of an unusually cold and wet season in the beginning of 1905.

Coal—During the year 1905 the total output from the collieries in India and Burma amounted, as shown in Appendix 28, to 8 43 million tons, against 8 22 million tons in 1904. The exports of Indian coal to Indian ports, principally Calcutta to Bombay, Karachi and Madras, rose from 1 45 million tons to 1 64 million tons or by 190 thousand tons, and those to ports outside India including Burma, principally Calcutta to Rangoon and Ceylon, from 896 88 thousand tons to 1,144 68 thousand tons or by 217 80 thousand tons. The imports of coal from the United Kingdom decreased from 174 70 thousand tons to 147 73 thousand tons or by 26 97 thousand tons, and those from other countries from 79 17 thousand tons to 50 02 thousand tons or by 29 15 thousand tons.

The total quantity of Indian coal consumed by railways during the year 1905 increased, as shown in Appendix 27, from 2 45 million tons to 2 67 million tons or by 220 thousand tons, and the amount of foreign coal consumed from 17 43 thousand tons to 18 23 thousand tons.

The improvement in the traffic in coal carried by railways was due principally to the increase of 215 76 thousand tons and Rs 19 87 lakhs recorded by the Bengal-Nagpur railway, owing to the traffic from the Santonia and Jhettah coal fields having been carried *via* the Adra-Kharagpur route, instead of *via* Asansol, to Calcutta for shipment. On the East Indian railway the quantity carried increased by 169 80 thousand tons and the earnings by Rs 10 57 lakhs, due to larger despatches for foreign railways and for private factories.

The average rate for all descriptions of goods carried per ton per mile, *viz*, 5 $\frac{1}{4}$ pies, or just under $\frac{1}{2}$ penny, was the lowest recorded since 1884, in which year the rate was 7 $\frac{1}{4}$ pies, while the average distance over which a ton of goods was carried, *viz*, 177 miles, was the highest.

The additional mileage worked, the larger traffic handled and the increase in the train-mileage run necessitated a corresponding increase in the working expenses, and although large sums were expended by the principal railways in renewing their permanent-way and rolling stock, and in strengthening bridges, the railways were worked during 1905 at a slightly higher percentage of gross earnings, *viz*, 47 $\frac{3}{4}$, against 47 $\frac{1}{4}$ per cent. in the previous year.

Financial results to the State.

11 The financial result of the working of the State and Guaranteed railways for the year 1905 was a net gain to the State of 263 85 lakhs of rupees, the largest yet obtained in any year, after meeting, in addition to the expenses of working, all charges for interest on Capital outlay by the State and on Capital raised by Companies, and also the annuity payments for railways purchased by the State, including both interest and the portion that represents redemption of Capital. This is the sixth year in succession in which there has been a surplus.

In the subjoined table, which gives details of the charges against Revenue for the year 1905 in comparison with the two preceding years, the ordinary interest charges are first deducted, and, on this basis, *i.e.*, after excluding the portion of the annuity payments representing redemption of Capital, Rs 98 28 lakhs, the surplus to the State for the year 1905 amounts to Rs 362 13 lakhs. It is to be noted that even this understates the real surplus derived from the railways open to traffic, as the

interest charges include the interest on outlay on lines under construction, which, if these lines were being constructed by private enterprise, would be charged to the Capital account.

The results for the two old Guaranteed railways, the Bombay, Baroda and Central India and the Madras railways, are shown in a separate column in this table, in order to bring out the unfavourable effect to the State of the higher rate of guaranteed interest (5 per cent) paid on nearly the whole Share Capital of these lines. On these two railways taken together there was a net loss to the State of over 25 lakhs of rupees, the loss on the Madras railway being nearly 32 lakhs, while there was a surplus of over 7 lakhs on the Bombay, Baroda and Central India railway.

	1903			1904			1905		
	State railways	Guaranteed railways (Madras and Bom. Baroda and Central India)	Total	State railways	Guaranteed railways (Madras and Bom. Baroda and Central India)	Total	State railways	Guaranteed railways (Madras and Bom. Baroda and Central India)	Total
REVENUE									
Gross traffic receipts—State railways	Rs 20,80,67,700	Rs 10,60,67,700	Rs 31,41,34,400	Rs 31,91,50,000	Rs 31,15,69,000	Rs 31,40,69,300	Rs 31,33,99,621	Rs 31,40,69,300	Rs 31,47,69,500
Gross traffic earnings—Guaranteed railways	Rs 2,05,81,000	Rs 2,15,69,000	Rs 3,15,69,000	Rs 3,15,69,000	Rs 3,15,69,000	Rs 3,15,69,000	Rs 3,33,99,621	Rs 3,33,99,621	Rs 3,33,99,621
Repayment of advances of interest—Subsidized railways	Rs 6,41,951	Rs 6,41,951	Rs 7,22,700	Rs 7,22,700	Rs 7,22,700	Rs 6,41,951	Rs 6,41,951	Rs 6,41,951	Rs 6,41,951
Total Revenue	Rs 29,86,89,757	Rs 20,61,000	Rs 40,60,67,700	Rs 31,99,17,744	Rs 31,15,69,000	Rs 31,40,69,300	Rs 31,33,99,621	Rs 31,40,69,300	Rs 31,47,69,500
EXPENDITURE									
Working Expenses—State railways	Rs 14,07,14,717	Rs ..	Rs 14,07,14,717	Rs 16,45,70,710	Rs ..	Rs 15,45,70,710	Rs 16,62,00,300	Rs ..	Rs 16,62,00,300
Working expenses—Guaranteed railways	Rs 1,65,69,000	Rs 1,65,69,000	Rs ..	Rs 2,05,69,400	Rs 2,05,69,400	Rs ..	Rs 1,65,69,600	Rs 1,65,69,600	Rs 1,65,69,600
Share of surplus profits paid to Companies—Guaranteed railways	Rs ..	Rs 16,12,618	Rs 16,12,618	Rs ..	Rs 16,01,133	Rs 16,01,133	Rs ..	Rs 20,63,640	Rs 20,63,640
Share of surplus profits paid to Companies—State railways	Rs 40,00,000	Rs ..	Rs 40,00,000	Rs 6,01,651	Rs ..	Rs 6,01,651	Rs 6,01,651	Rs ..	Rs 6,01,651
Land and Supervision charges—Guaranteed railways	Rs ..	Rs —1,700	Rs —1,700	Rs ..	Rs —1,15,721	Rs —1,15,721	Rs ..	Rs 8,50,400	Rs 8,50,400
Land and subsidy charges—Guaranteed railways	Rs 3,01,140	Rs ..	Rs 3,01,140	Rs 7,63,615	Rs ..	Rs 7,63,615	Rs 4,51,931	Rs ..	Rs 4,51,931
Miscellaneous railway expenditure	Rs 10,07,603	Rs ..	Rs 10,07,603	Rs 8,73,900	Rs ..	Rs 8,73,900	Rs 2,43,001	Rs ..	Rs 2,43,001
Total expenditure	Rs 14,60,47,101	Rs 1,70,31,713	Rs 16,30,78,000	Rs 16,18,4,667	Rs 1,7,01,725	Rs 17,01,4,32	Rs 17,19,73,000	Rs 1,77,70,410	Rs 19,16,59,410
Net Revenue	Rs 16,83,4,660	Rs 1,56,937	Rs 10,51,0,000	Rs 16,63,72,07	Rs 1,33,67,032	Rs 18,53,60,310	Rs 1,77,70,041	Rs 1,33,60,600	Rs 19,07,79,000
ORDINARY INTEREST CHARGES									
Interest on Capital outlay—State Railways	Rs 4,02,66,612	Rs ..	Rs 4,02,66,612	Rs 6,17,70,417	Rs ..	Rs 6,17,70,417	Rs 6,46,00,000	Rs ..	Rs 6,46,00,721
Interest on debt for purchase of railways	Rs 1,77,70,074	Rs ..	Rs 1,77,70,074	Rs 1,77,70,074	Rs ..	Rs 1,77,70,074	Rs 1,77,70,074	Rs ..	Rs 1,77,70,074
Interest on advances of Capital to Companies	Rs 60,92,693	Rs ..	Rs 60,92,693	Rs 60,92,693	Rs ..	Rs 60,92,693	Rs 73,73,124	Rs ..	Rs 73,73,124
Interest on Capital raised by Companies	Rs 1,80,73,000	Rs ..	Rs 1,80,73,000	Rs 1,68,00,013	Rs ..	Rs 1,68,00,013	Rs 1,68,00,300	Rs ..	Rs 1,68,00,300
Portion of annuities in purchase of railways representing interest on Capital	Rs 3,65,67,600	Rs ..	Rs 3,65,67,600	Rs 3,66,10,733	Rs ..	Rs 3,66,10,733	Rs 3,63,61,300	Rs ..	Rs 3,63,61,300
Interest on Capital of Guaranteed Companies	Rs ..	Rs 1,60,00,702	Rs 1,60,00,702	Rs 1,60,00,702	Rs 1,60,00,702	Rs 1,60,00,702	Rs ..	Rs 1,60,00,600	Rs 1,60,00,600
Total Interest	Rs 12,60,72,000	Rs 1,60,00,702	Rs 14,23,71,700	Rs 13,05,10,335	Rs 1,60,16,000	Rs 14,60,38,305	Rs 13,30,00,000	Rs 1,60,65,600	Rs 15,09,76,000
Surplus of net Revenue over Interest	Rs 2,60,73,642	Rs —31,47,365	Rs 2,78,20,177	Rs 3,70,63,835	Rs —21,60,303	Rs 3,78,74,014	Rs 3,67,70,210	Rs —2,16,100	Rs 3,62,13,100
Portion of annuity payments representing redemption of Capital also charged against Revenue	Rs 9,64,965	Rs ..	Rs 9,64,965	Rs 9,64,965	Rs ..	Rs 9,64,965	Rs 9,64,965	Rs ..	Rs 9,64,965
Actual net gain +, or loss—	+Rs 1,65,08,687	-Rs 31,47,365	+Rs 1,33,61,22	+Rs 2,64,61,072	-Rs 21,60,303	+Rs 2,63,22,293	+Rs 2,60,00,061	-Rs 2,16,100	+Rs 2,63,61,821

12 As regards an account of the Capital liability in connection with railways owned by the State, there are some complications in stating the amount, owing to the fact that, in the case of some of the lines taken over, the purchase price is being paid by means of annuities. In these cases it seems correct to deduct from the original commuted Capital at which the lines were taken over, the amount redeemed by annuity payments up to date. On this basis the subjoined table shows the Capital liability at the end of 1905 on account of all railways classed as State railways, the State outlay, as recorded in rupees in the accounts being converted into sterling at the rate of Rs 15=£1. The total Capital amounts to £248 44 millions (the details by railways being shown in Appendix 9), and on this the net revenues of the State railways for 1905, £11 51 millions, give a return of 4 63 per cent. The total Capital of the two old Guaranteed railways amounts to £23 53 millions as detailed below, and on this the net earnings of these railways for 1905, £904 64 thousands, give a return of 3 84 per cent.

Capital liability on account of railways classed as State railways at end of 1905.

1 Share Capital of purchased railways being paid off by annuities —

Commututed value of stock purchased 85,010,259

Deduct—

Commututed Capital representing annuities which were purchased by creation of debt (liability included under item 8) ..	12,754,190
New stock of the Great Indian Peninsula railway exchanged for portion of annuity (liability included under item 5)	1,750,000
Capital redeemed by annuity payments ..	5,210,912
	<hr/>
	19,715,132

Net outstanding	...	...	...	...	...	65,295,127
2 State outlay	.	...	.	.	...	94,590,686
3 Debt incurred for purchase of railways			.			34,201,992
4 Capital advanced by Government to Companies			.			13,887,814
5 Capital raised by Companies on the Secretary of State's guarantee (including overdrafts of Capital)				...		40,460,328
TOTAL CAPITAL LIABILITY ...						248,435,947

Capital liability on account of Guaranteed railways at end of 1905.

Capital raised on the Secretary of State's guarantee, including overdrafts —

	£	£
Madras railway . . . . .	..	12,553,430
Bombay, Baroda and Central India railway . . . . .	..	10,980,214
	<hr/>	23,533,644

Rates and fares.

13 In August 1905 the conditions and the minimum rates prescribed for the carriage of coal for the general public and for State or other railways were revised. Previously the minimum laid down was $\frac{1}{10}$ th of a pie per maund per mile, but it was considered that this restricted the trade in places distant from the coal-fields. The minimum to which railways may now reduce their rates has been fixed at $\frac{1}{10}$ th of a pie for distances up to 300 miles, plus $\frac{1}{15}$ th of a pie from 300 to 500 miles inclusive, and plus $\frac{1}{20}$ th of a pie for any distance in excess of 500 miles. The conditions are that the rates shall be calculated on the through distance between the station of origin and the station of destination of consignments, that, when there are two or more routes to destination from the colliery where the traffic originates, the railway or railways forming the longer route may calculate charges on the same mileage as

the railway or railways forming the shorter route, that coal for the use of foreign railways is charged at the same rates and under the same conditions as coal carried for the public, that the rates charged are divided between the railways over which the traffic is carried in proportion to the mileage of each, provided that, if the distance the coal is carried over any railway is less than 25 miles, the mileage of that railway in dividing the freight is reckoned as 25 miles, and that these rates shall be subject to revision at the end of three years from 1st September 1905.

Cheap "week-end" return tickets to and from the principal stations on the broad gauge section of the *Bombay, Baroda and Central India railway* were introduced as an experiment.

"Week-end" return tickets, at single fares for the double journey, were introduced by the *Eastern Bengal (State) railway*

The East Indian railway introduced the following reduced scale of charges for 3rd class passengers --

for the first 100 miles, 2½ pies per mile,
from 101 to 300 , 2 pies per mile,
for additional distances
over 300 miles, 1½ pies per mile

The Company also increased to 6 pies per maund its terminal charge on both local and foreign traffic generally in class goods on all parts of its system, and on mineral and special class goods at certain stations, and introduced a special reduced through rate of Re 0 12-1 per maund for coal from all its colliery stations to all stations on the Kalka-Simla railway, to encourage the use of coal for domestic purposes at the hill stations served by the latter.

The higher charges for coaching and goods traffic over the Ludhiana-Dhuri-Jakhal railway were reduced to the level of those in force over other sections of the *North Western (State) railway*, the administration of which also introduced locally the reduced rates for coal referred to in the first paragraph of this section, subject to the usual conditions regarding risk and handling, to encourage the supply of cheap fuel.

On the *Oudh and Rohilkhand (State) railway* the 3rd class passenger fares were reduced, the rate of 2 pies per mile, which before applied to distances of above 100 miles, now applying to distances above 75 miles, and the rate of 1½ pies applying to distances above 150 miles instead of to distances of above 300 miles.

With effect from 1st of June 1905 special rates, from Mormugao Harbour to the principal stations on the *Southern Mahratta railway*, were quoted for goods booked under combined through bills of lading from British and Continental ports in conjunction with a line of steamers running direct to the port of Mormugao.

Important measures and events.

14. Measures for the comfort and convenience of 3rd class passengers — A circular was issued on the 22nd of March 1905 to the several railway administrations, desiring, as stated in last year's report, their attention to the urgent necessity for providing (i) facilities for passengers to obtain their tickets a longer time before the departure of trains than they are at present able to do, (ii) facilities for examining tickets of 3rd class passengers, both at starting and roadside stations, as will enable the passengers to have proper access to the platform and take their seats in the train without the crush which too frequently occurs, and (iii) carriage accommodation for 3rd class passengers to prevent the over-crowding which is much too general.

The replies since received indicate that the administrations of the several railways appreciate the attitude of the Railway Board towards 3rd class passengers who are their best clients, providing as they do over 84 per cent of the total receipts from passenger traffic.

In regard to the first point the majority of the most important railways have provided continuous booking at the principal stations and the opening of city offices for the issue of tickets, and at smaller stations the opening of ticket offices from periods varying from half an hour to two hours ahead of the train.

The second matter to which attention was called involves some re-arrangement of the waiting halls and platform gates. The railway administrations generally recognise that greater facilities are desirable and are taking steps to remedy the crowding and inconvenience complained of.

Under the third head the obvious remedy is to increase the stock of third class carriages, which is being done on most lines. In one instance it was pointed out that the passengers are themselves to blame for over crowding. This is probably due to the natural wish of families making a journey to travel in the same carriage or compartment. It may be said generally that all three matters to which attention has been called by the Railway Board are receiving their earnest attention.

Another matter, which was not touched upon in the circular, was the most suitable style of third class carriage. The Railway Board have made enquiries of all the different railway administrations and find that there is some diversity of opinion, and they think that the carriage most suitable for the 3rd class passengers has yet to be designed. One of the points raised in the discussion was the provision of upper bunks or of luggage racks in 3rd class carriages. Some of the principal railways are of opinion that passengers distinctly appreciate and make use of the bunks provided. In the day time these bunks can be used as racks, and at night for lying down for a certain proportion of the occupants. Other railways consider that racks for luggage conduce more to the comfort of 3rd class passengers than do sleeping bunks. This latter opinion obtains more in the south than in the north of India, but all the railways are quite prepared to meet the wishes of the majority of their passengers as soon as they can, by experiment, ascertain what design is most appreciated.

Standard time.—With effect from the 1st July 1905 a standard time, which in India is exactly $5\frac{1}{2}$ hours in advance of Greenwich and 9 minutes in advance of Madras time, and in Burma $6\frac{1}{2}$ hours ahead of Greenwich and 5 minutes 23 seconds earlier than Rangoon time, has been adopted on the railways in India and Burma, other than on small local lines where the change would be inconvenient.

Indian Railway Conference Association.—A special meeting of the Indian Railway Conference Association was held in Simla from the 31st July to the 11th August 1905 to consider the revised general rules for working open lines of railway in India, and other matters.

Risk Notes.—Revised forms of Risk Notes B and H, under which a greater measure of responsibility will devolve upon railway administrations in the case of consignments carried by them at "special reduced" or "owner's risk" rate, have been considered, and have been referred to the administrations of the several Indian railways for their acceptance.

Construction of sidings into private premises.—A revised form of agreement for the extension of railway sidings into private premises was issued in July 1905 for adoption on State railways and as a general guide to other railways in preparing similar agreements. Under the revised terms the charge of 6 per cent per annum—previously made by railways to cover interest, maintenance and depreciation on the cost of all permanent-way materials, etc., provided, laid and maintained by the railway administration, and of all works done in connection with such sidings at the expense of the railway—has been relinquished.

Use of local manufacturers for railway purposes.—The Bengal Iron and Steel Company, Limited, have entered into a contract with the Secretary of State for India for the manufacture of steel rails and rolled sections at their Barakar Works, under the terms of which the latter is required to pay to the company an annual subsidy not exceeding £1,500, subject to a reduction of Rs 3 for every ton of steel rails or bars purchased by, or on behalf of, Government. The Managers and Engineers-in-Chief of State railways have accordingly been requested to utilize steel of local manufacture so far as it is suitable for the works in their charge.

The Railway Board, after duly considering the representations received from various firms of manufacturing engineers in India asking that they might be given an opportunity of tendering for the construction of wagon frames and bodies in this country, have decided that, for a period of three years, tenders should be called for publicly in India for the supply of frames and bodies of twenty-five per cent of the goods stock sanctioned for State railways, the requisite wheels, axles, springs and draw-bars to complete the wagons being indented for from England and supplied by the railway administration to the firm whose tender is accepted.

Supply of Australian wooden sleepers.—Mr J. Adam, Executive Engineer, Railway Department, was deputed by the Government of India in 1904 to investigate the question of the supply of wooden sleepers from Australia, and has submitted a preliminary report on the production of wood for sleeper purposes in the Eastern States. A more complete report is expected embracing information relating to the Western States.

Improved lighting of trains—This has continued to receive the attention of the Railway Board, and railway administrations have been kept informed of experiments made in electric lighting under two different systems. The application of incandescent mantles to Pintsch's gas burner is being experimented with.

St John's Ambulance Institution—To stimulate the interest of the staff of the East Indian railway generally in St John's Ambulance Institution, established for the purpose of imparting instruction in the art of giving first aid to persons injured in railway accidents, the Company decided to give a reward to all those who pass the examination.

On the Oudh and Rohilkhand railway fair progress has been made with ambulance work, and arrangements have been made to equip brake vans of all passenger trains with implements, and to supply books and appliances to such of the staff as have qualified, for affording first aid to the injured.

A class for general instruction of employés of the Rajputana-Malwa railway in affording first aid to injured persons was opened at Ajmer in January 1905.

On the South Indian railway an ambulance class in first aid to the injured is being held at Madura.

Purchases of railways by the State—The Bengal Central Railway was purchased by the State and merged in the Eastern Bengal (State) railway system with effect from the afternoon of the 30th June 1905.

Notice was given to the Bombay, Baroda and Central India Railway Company of the termination, with effect from the 1st January 1906, of the Company's contracts with the Secretary of State for India. The railway, after purchase by the State, was made over to a re-constituted Company to work.

The Noakhali (Bengal) Railway Company suggested the transfer of their line to the Assam-Bengal railway. The purchase of the line by the State as from 1st January 1906 was accordingly agreed to and arrangements made to incorporate it with the Assam-Bengal railway.

Principal contracts entered into during the year—An agreement for the working by the Southern Mahratta Railway Company of the Bellary-Rayadurg and Hospet-Kottur famine feeder lines.

A memorandum of terms for the working by the Bengal-Nagpur Railway Company of the Mourbhany Light railway for the period 1st January 1905 to 31st December 1905, and thereafter from year to year until the agreement is terminated by notice.

On the 4th October 1905 an indenture was executed with the Southern Punjab Railway Company for the construction of the MacLeod Ganj-Ferozepore-Ludhiana extension.

On the 4th December 1905 an indenture was executed with the Barsi Light Railway Company, making certain modifications in the Company's contract of 20th August 1902 for the construction and working of the Pandharpur and Tadwalla extensions, and providing for the issue of Debenture Stock.

On the 14th December 1905 an indenture was executed with the Bengal and North-Western Railway Company, Limited, continuing, with modifications, the contract dated 18th July 1890 relating to the Thhoot (State) railway, and also modifying the contract of 12th December 1882 relating to the Company's railway.

On the 27th December 1905 an indenture was executed with the Bombay, Baroda and Central India Railway Company for the issue of India Stock on purchase of the Company's undertaking, and for provisional working of the Company's system as from 31st December 1905.

In connection with the running by Messrs Frank O Strick & Co of London, of a new line of steamers to the Port of Mormugao, an agreement was executed between that Company and the Southern Mahratta Railway Company for the through booking of traffic between the British and Continental ports and stations on the Southern Mahratta railway.

The Bengal-Nagpur railway took over the working of the Mourbhany Light railway on and from the 1st January 1905.

In November 1905 the administrative offices of the *Bombay, Baroda and Central India railway* at Bombay were seriously damaged by fire. Their restoration is well in progress.

On the *Eastern Bengal State railway* a wagon ferry service was established on the Ganges between Damukdina Ghat and Saia Ghat in February 1905 for crossing heavy machinery and coal. With effect from the 15th May 1905 through booking of goods traffic, *via* Dhubri Ghat, was established between stations on the Northern and Behar sections of the line and *via* the steamer stations of the Assam Service south of Dhubri Ghat, and stations on the Dacca section *via* Jagannathganj.

On the 6th February 1905 the Government of India sanctioned the purchase of the Chabra section of the Bina Goona Baran railway by the Gwalior Durbar from the Tonk Durbar, on the condition that the Gwalior Durbar agreed to abide by the terms under which that section of the line was then worked by the *Great Indian Peninsula railway*.

The administrations of the *Bhavnagar-Gondal Junagadh-Porbandar and Morvi railways* introduced a through service between Wadhwan Junction and Jamnagar, consequent on the establishment, on the 4th March 1905, of through direct connection between Wadhwan Junction and Rajkot Junction by the conversion of that portion of the Morvi railway from the 2' 6" to the metric gauge.

Through booking of goods and passenger traffic between the *Tarakeshwar Magra Light railway* and the Calcutta Steam Navigation Company's steamer service, *via* Tribeni, was introduced from January 1905.

Important works completed

15. On the *Bengal Nagpur railway*, the work of doubling the line through from Howrah to Khairpur, and the renewal of the girders (7 spans of 170 feet) of the Kanhan bridge near Kamptee.

By the *Bombay, Baroda and Central India railway*, a new locomotive station, for joint use with the Tapti Valley railway, at Kankia Khali, and the interlocking of points and signals thereat, a new station at Vile Parle, between Santa Cruz and Andheri, the renewal and duplication of minor girders between Ahmedabad and Viramgam, and the interlocking of 49 third class stations on the Rajputana-Malwa railway.

On the *Eastern Bengal (State) railway*, the bridges across the Churni (3 spans of 120 feet skew), near Ranaghat, and the Jellinghee (3 spans of 120 feet and 1 span of 250 feet with 35 feet headway), at Krishnagar, on the Murshidabad branch, and heavy renewals of girders on the Northern section to admit of the running of a heavier class of engines.

On the *East Indian railway*, the riverside warehouse at Howrah, the remodelling and reconstruction of Delhi station, and a branch line to serve the Moodilih, Angarpethia and Guzliton collieries.

By the *Great Indian Peninsula railway*, the Agra Road station, and the line therefrom to the point of junction with the Agra-Delhi Chord railway which now forms a part of the main line from Agra to Delhi, the quadrupling of the line between Byculla Junction and Cawnpore Road, the doubling of the line between Khandwa and Itarsi, and the interlocking of points and signals at four intermediate stations.

By the *North Western (State) railway* the doubling of the line between Lahore and Amritsar, the remodelling and interlocking of Bhatinda station yard, and the construction of one wing of the Central Offices at Lahore.

The *Oudh and Rohilkhand (State) railway* permanent bridge (15 spans of 200 feet) over the Ganges river at Allahabad.

By the *Bengal and North-Western railway* a new bridge of 3 spans of 80 feet over the Bolan river, to replace the pin girder bridge of 3 spans of 60 feet, and the construction of the bridges and raising of the main bank of the Sagauli-Raxaul branch.

On the *Bengal-Dooars railway*, the Hathinulla girder bridge of 3 spans of 150 feet, the Khanabati deviation, rendered necessary by irrigation works, including

a bridge of 3 spans of 40 feet girders, and special protection works at the larger bridges

On the *Burma railways*, the relaying of 28 miles of $41\frac{1}{4}$ -lb steel track on the main line with 50 lb steel rails, the interlocking of the points and signals at Mandalay and Myohaung, a new overbridge, with a clear span of 150 feet and a roadway 60 feet wide, at Shwesle Pagoda Road, and the doubling of the line between Pazundaung and Thingangyin and between Insein and Hlawga.

The *Morvi railway* converted the Wadhwan Rajkot section from the 2' 6" to the metric gauge

The *Rohilkund and Kumaon railway* relaid with 50 lb section rails 30 miles of its own and 21 miles of the State line, which before were laid with $41\frac{1}{4}$ lb rails

Two new permanent stations on the *Buldharpore-Bihar Light railway*

On the *Kalka Simla railway* the permanent-way and curves, gradients and bridges were improved

(1) A "Joint Water Supply" scheme, proposed in 1902, for supplying water in reliable and adequate quantities to the East Indian and Kalka-Simla railways and the Municipality at Kalka

The *Darjeeling-Himalayan railway* extended the station building, and provided a new platform, loop siding, new engine shed and additional goods shed at Ghum.

Accidents

16 The following is a statement of accidents of all descriptions to persons, which have occurred during the last five years —

YEAR	Passengers			Servants			Other persons						Total all classes													
	From accidents to trains, rolling stock, permanent way, etc.		By accidents from other causes, including incidents from their own want of caution or misconduct	Total	From accidents to trains, rolling stock, permanent way, etc.		By accidents from other causes, including incidents from their own want of caution or misconduct	Total	From accidents to trains, rolling stock, permanent way, etc.		Whist passing over railways at level crossings	Total	From accidents to trains, rolling stock, permanent way, etc.		Suicides	Total										
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured										
1901	3	47	91	251	94	293	11	83	261	375	275	48	13	11	28	3	512	170	120	9	33	16	745	211	1,114	670
1902	127	181	93	259	223	473	37	95	269	364	306	19	13	13	16	3	512	162	108	5	21	26	700	20	1,331	1,141
1903	50	116	93	331	143	447	15	95	275	390	290	485	12	7	16	3	510	172	138	5	35	22	711	209	1,144	1,141
1904	11	83	105	921	116	104	23	103	230	361	273	467	6	15	23	1	577	186	120	2	41	11	767	218	1,156	1,089
1905	3	140	115	356	118	196	15	115	308	162	320	577	5	15	25	4	61	173	134	5	39	23	664	20	1,305	1,223

There was an increase of 119 and 201 in the total number of persons killed and injured from all descriptions of accidents during 1905, as compared with the previous year

The total number of persons of all classes killed by causes beyond their control was 23 against 40, and the number injured 270 against 201. Out of a total of 218 16 millions against 227 10 millions of passengers travelling, and of 9,900 48 millions of miles against 9,006 85 millions of miles travelled, 3 passengers were killed and 140 injured against 11 killed and 83 injured. This gives an average of one fatal casualty in 82 72 millions against one in 20 65 millions of persons travelling, and an average of one in 3,300 16 millions against one in 818 80 millions of miles travelled in 1905 and 1904 respectively.

17 The following are particulars of the more serious train accidents —

Nos 124 down goods and 64 down van goods trains collided at Khana junction, *East Indian railway*, on the 7th February 1905, due to the driver of the former train running against signals. One person was killed and seven injured. The rolling-stock was considerably damaged.

No 4 down mixed train was derailed at mile 90-22, between Lalmai and Comilla stations, *Assam-Bengal railway*, on the 23rd February 1905, due to the removal of fish plates and bolts and the slewling of the line by some person or persons unknown. Four railway servants were seriously injured, one of whom subsequently died. The rolling-stock was considerably damaged.

Nos 7 up mixed and 84 down goods trains collided at Amethi station, *Oudh and Rohilkhand (State) railway*, on the 1st June 1905, due to the engine of the latter train fouling the crossing. Eight passengers and twelve railway servants were injured. The rolling-stock was damaged.

No 6 down passenger train collided with a pilot engine at Paitabgarh station, *Oudh and Rohilkhand (State) railway*, on the 2nd June 1905, owing to points having been incorrectly set. Five passengers and one railway servant were injured.

Nos. 9 up passenger and 10 down mixed trains collided at Kot Sultan station, *North Western (State) railway*, on the 17th July 1905, due to points not having been correctly set. Seventeen passengers were injured. The rolling-stock and permanent-way were damaged.

Nos 101 up and 64 down goods trains collided at Taljhari station, *East Indian railway*, on the 17th November 1905, due to the disengagement of signals by the driver of the former train. One railway servant was killed and five injured. The rolling-stock was considerably damaged.

No 4 down Punjab Bombay mail and M M up troop special trains collided near Lahore station, *North Western (State) railway*, on the 1st December 1905, due to points having been wrongly set. Seventeen passengers were injured. The rolling-stock was considerably damaged.

No. 4 down mixed train was derailed near Mantala station, *Assam-Bengal railway*, on the 27th December 1905, due to the bad state of the road. Three passengers were injured, two of whom subsequently died. The rolling stock was damaged.

Damages by floods and rainfall.

18 The line between Naupura and Vizianagram on the East Coast Section of the *Bengal Nagpur railway* was seriously damaged by a cyclonic storm of exceptional violence in September.

The *Bombay, Baroda and Central India railway system* suffered considerably from heavy rain in July. Several breaches occurred both on the main line and branches, and there was serious damage to the permanent-way and bridges.

On the *Eastern Bengal (State) railway* floods in August washed away a pier of a bridge on the Kaunia-Dhubri extension and damaged the wing-walls of a bridge on the Brahmaputra Sultanpur branch. The Brahmaputra river rose in flood in September and washed out the line in places at Goalundo Ghat.

On the *East Indian railway* heavy rainfall in September caused the Karmnasa river to overflow and flood a portion of the main line between Dildarnagar and Gahma. This rainfall also caused serious breaches in several places and considerable damage to many bridges on the Moghal Sarai Gya section, and to a bridge on the Barun-Daltonganj branch. Floods caused by heavy rain in July washed away a portion of the Tarkessur branch.

Portions of the *Great Indian Peninsula railway* suffered from floods caused by heavy rain in July. On the Nagpur branch, between miles 382 and 390, the embankment was badly breached in several places in the vicinity of bridges, the permanent-way at one place and the wing-wall of an abutment being washed away. On the North-East line, between Dongaigaon and Bagmar, heavy rain washed away a portion of the embankment, the rush of water carrying the track out to the fencing.

Heavy slips of boulders occurred on the *Nilgiri railway*, causing interruption to through traffic during the latter part of November.

The only serious flood damages during the year on the *North Western (State) railway* were caused in September by an exceptional flood in the Chenab river, which effected several small breaches in the bank between Multan and Shershah and interrupted traffic for 96 hours.

Excessive rainfall during June, July, October and November breached the *Assam-Bengal railway*, and caused considerable detention to traffic, in several places.

On the *Bengal and North-Western railway* the Orai bridge, on the Katarman Ghat branch, was partly washed away by a spill from the Girwa river in July, involving a temporary diversion till September. Floods in September partially damaged several bridges between Nirmali and Rahaula, interrupting the traffic for about three weeks.

On the *Bhavnagar-Gondal-Junagadh-Portbandar railway* floods due to heavy rain in July caused washouts at several places between Limbdi and Wadhwan City, and on the Dhrangadra railway. Breaches occurred at places on either side of Haldmatia and Pad-dhari stations on the Jamnagar railway.

Heavy floods caused considerable damage on the *Burma railways*. The south abutment of a bridge and the approaches of several others were washed away. The line was badly breached in several other places, especially on the Alon branch.

The *Jodhpur-Bikaner railway* was breached by floods in September at miles 316 to 318 and at miles 320 to 323 on the Meita Roid-Bhatinda section.

Heavy rain in July breached the *Morvi railway* in several places, on the metre gauge between Wadhwan and Than and on the 2' 6" gauge between Vankanei and Morvi.

On the *Southern Mahratta railway* the Hospet-Kottur branch line, at places between miles 36 and 40, was washed away by heavy rain in October. On the 15th October, between Makhdurg and Dodballapur stations, the engine attached to the Down Mail train was derailed by several tons of rock slipping from the side of the cutting and striking the engine while the train was passing. No one was injured.

Owing to the bursting of some "bunds" on the Sone and Maithan rivers in September, the whole of the country between Chero and Harnaut stations on the *Buldhana-Pore-Behai Light railway* was flooded. A culvert was washed away and the line for a space of about 30 feet was left suspended.

Heavy rainfall and floods in July breached the *Tarakeshwar-Majra Light railway* in several places. Traffic between Tarkessur and Bhastara was stopped for about three weeks.

At the end of July there were heavy floods and washouts on the portion of the *Honiak-Amta Light railway* between Baigachia Junction and Amta, also on the whole length of the Autpur section.

The *Honiak-Sheakhala Light railway* was breached between Moshat and Sheakhala at the end of July.

A breach was caused by floods in August on the Gosaigaon-Patiagaon section of the *Jorhat (State) railway*. Through communication between the river terminus and Jorhat stations was not restored till December.

Railway staff

19 The total number in railway employ at the close of the year was 452,058, of which 6,535 were Europeans, 9,175 Eurasians and 436,348 Natives. Of the Europeans and Eurasians 12,989 were enrolled as volunteers.

20 The Police force employed for the maintenance of law and order on railways and for the protection of railway property is provided by the Civil Department, the State bearing, except in the case of State lines worked by the State and the old Guaranteed railways, three-tenths and the railways paying seven-tenths of the expense incurred.

21 Every monthly paid employé, who is neither pensionable nor a menial servant, is obliged to be a member of the Provident Fund and is required to

subscribe monthly amounts varying on different railways but not exceeding one-twelfth of his salary. At the close of the half-year the railway distributes, as bonus among the depositors, a first contribution equal to one half of their subscriptions, and a second contribution not exceeding one-half of such subscriptions or one per cent of net earnings.

22. The Fine Fund is used in the relief of families left in destitute circumstances, and to assist in keeping up schools, recreation clubs and similar institutions.

23. On the larger railways schools are provided and maintained at all centres where the number of children is sufficient to justify the employment of the teaching staff. The fees charged are graduated so as not to press too heavily on the poorer employés. Government, in the Educational Department, allow certain grants towards the maintenance of the schools, and any deficit is made good from the revenues of the railway or from the Fine Fund. Where the number of employés is not large enough to justify the provision of a railway school and there already exists a public or private school in the town, the schooling fees are borne wholly or in part by the railway.

The assistance thus given to employés is much appreciated, and a proper standard of education is ensured by the examination which is conducted yearly by the Government Inspectors of Schools before the grant can be drawn.

The number attending railway schools amounted, at the close of 1905, to 6,907 children and 6,106 apprentices and workmen.

Railway surveys

24. The following surveys were completed during 1905 —

The re-survey of the Gondia-Chanda railway, with a branch from Brahmapuri to Nagpur, 212 miles, on the 2' 6" gauge, and the survey of a line from Purulia to Ranchi, 72 miles, also on the 2' 6" gauge, by the *Bengal-Nagpur railway*.

Lines from (1) Nar to Wasu, 13 miles, on the 5' 6" gauge, (2) Vijapur to Wadnagar, 17 miles, on the 3' 3 $\frac{3}{8}$ " gauge, (3) Hansi to Jakhali, 51 miles, also on the 3' 3 $\frac{3}{8}$ " gauge, and (4) Nar to Piej, 17 miles, on the 2' 6" gauge, all by the *Bombay, Baroda and Central India railway*.

An extension of the Murshidabad branch of the *Eastern Bengal (State) railway* from Lalgola to Gheria, 13 miles, on the 5' 6" gauge, and from Krishnagar station on the same branch to Jellinghee, 56 miles, on the 2' 6" gauge.

By the *Great Indian Peninsula railway* from Bellarpur to Warangal, eastern route, 183 miles, Kazipet branch, 8 miles, and a portion of the western route from Muravaya to Chintalchem, 22 miles, on the 5' 6" gauge, and reconnaissance surveys of lines from (1) Dewalwari to Bamena, (2) Riponpelli to Gawalkoonda, (3) Sironcha to Gamalkonda, (4) Madarum to Chitir, and (5) Sironcha to Parkal, aggregating 175 miles.

The extension of the *Nilgiri railway* from Coonoor to Ootacamund, 12 miles (now under construction), on the 3' 3 $\frac{3}{8}$ " gauge, by the State.

Reconnaissance surveys by the *Nizam's Guaranteed State railway* of lines from (1) Purbhani to Latur, 71 miles, Hyderabad to Guntakal, 190 miles, and Wadi to Nanded, 210 miles, all on the 3' 3 $\frac{3}{8}$ " gauge.

By the *North Western (State) railway* lines from (1) Thal to Parachinar, 59 miles, (2) Chuharkana to Shorkot Road, 131 miles, (3) Lodhian to Khanewal, 57 miles, and (4) Patiala to Jakhali, 50 miles, all on the 5' 6" gauge.

A line from Balamau to Sitapur, 37 miles, on the 5' 6" gauge, by the *Oudh and Rohilkhand (State) railway*.

Lines from Pertahganj station, on the Tirhoot (State) railway, to Birpore on the bank of the Kosi river, 15 miles, and from Dhang, on the same line, to Bairagnia, together with a site for a permanent bridge over the Bagmati river, 3 miles, on the 3' 3 $\frac{3}{8}$ " gauge, by the *Bengal and North-Western railway*.

A reconnaissance for a railway from Bhano to Tengyueh, 124 miles, on the 2' 6" gauge, by the *Burma railways*.

The *Jodhpur-Bikaner railway* made a reconnaissance survey for a light line from Mirpur Khäs to Jhudo, 47 miles.

By the *Rohilkund and Kumaon railway*, for the extension, to Ramnagar Ghat, of the Dudhwa branch of the Lucknow-Bareilly railway, 21 miles, on the 3' 3 $\frac{1}{2}$ " gauge

By the *South Indian railway* for doubling the line from Madras Beach to Pallavaram, 15 miles, from Kumbakonam to Mannargudi, 23 miles, from Cuddalore to Vriddachalam, 34 miles, all on the 3' 3 $\frac{1}{2}$ " gauge

An extension of the *Baraset-Basirhat Light railway* from Basirhat to Hussanabad, 8 miles, on the 2' 6" gauge

Survey of the *Shahdara (Delhi)-Saharanpur Light railway* with a branch to Meerut, 125 miles, on the 2' 6" gauge

An extension of the *Howrah-Amrauta railway* from Autpur to Champadanga, 8 miles, on the 2' 0" gauge

25 The following surveys are in progress —

By the *Bengal-Nagpur railway* lines from (1) Kamptee to Ramtek, 20 miles, on the 5' 6" gauge, (2) Tumsar Road to Kitangi, 50 miles, (3) from a point on the Mandla branch of the Satpura railway to Bilaspur, 170 miles, and (4) from a point between Guimarsuni Hill to Sini, 52 miles, all on the 2' 6" gauge, and a reconnaissance survey from Guimarsuni Hill to a point between Nar-singhai and Chakulia, 55 miles, on the 2' 6" gauge

By the *Eastern Bengal (State) railway*, (1) the location of a line, on the 3' 3 $\frac{1}{2}$ " gauge, from Forbesganj station, on the Deobiganj branch of the Behai section, to the Nepil frontier, 6 miles, to serve Nepalganj, a rapidly rising trading centre situated three miles beyond the frontier, (2) from Rangpur station, on the Gauhati extension, to Tezpur in Assam, 78 miles, on the 3' 3 $\frac{1}{2}$ " gauge, and (3) from Netrokona to Lengar Bazar in Assam, 40 miles, on the 3' 3 $\frac{1}{2}$ " gauge

By the *Madras railway* from Dharmapuri, via Palakodu, to Krishnagiri, and from Palakodu to Bangalore, 92 miles, on the 2' 6" gauge

A reconnaissance survey by the *Nizam's Guaranteed State railway* for a line from Wadi to Kopbul

By the *North Western (State) railway* from Jhang, via Chinnot, to Singla, 70 miles, on the 5' 6" gauge

By the *Oudh and Rohilkhand (State) railway* from Rosa to Sitapur, 52 miles, on the 5' 6" gauge

By the *Bengal and North-Western railway* from Benares to Allahabad with a branch to Mirzapur, 75 miles, on the 3' 3 $\frac{1}{2}$ " gauge

A detailed survey for a railway on the 2' 6" gauge from Bhamo, on the *Burma railways*, to Tengyueh, 121 miles

By the *Assam Railways and Trading Company (Dibru Sadiya railway)*, an extension from Talap station to Sukhwa Ghat, 9 miles, on the 3' 3 $\frac{1}{2}$ " gauge

By the *Jolhpur Bikaner railway* from Borawar to Hissar, 180 miles, on the 3' 3 $\frac{1}{2}$ " gauge

The re-survey, by the *Rohilkund and Kumaon railway*, of the Pilibhit-Barmdeo branch, 38 miles, on the 3' 3 $\frac{1}{2}$ ' gauge

By the *South Indian railway* from Pilghat, via Kollengode, to Pollachi, 38 miles, on the 5' 6" gauge, and from Thiruturaipundi to Velairamayam, 20 miles, on the 3' 3 $\frac{1}{2}$ ' gauge

From Gadag, on the main line to Yalvigi, on the Haitha branch, about 38 miles, on the 3' 3 $\frac{1}{2}$ ' gauge, by the *Southern Mahatma railway*

Brief notes on projects for new lines.

26 The District Board of Kurnool submitted proposals for the construction, on the 3' 3 $\frac{1}{2}$ " gauge, of the Kurnool Road (Dhone), Kurnool railway (Madras), 32 miles, with the help of a special cess levied under the provisions of amended section 57 (u) of the Madras Local Boards Act, 1884 (V of 1881), supplemented by a loan from the Government of Madras under the Local Authorities Loan Act, 1879 (XI of 1879). The proposals are awaiting a decision on the question of the alignment of

the proposed through metre gauge connection between the railways in northern and southern India

Revised proposals for the construction of the Rawalpindi-Muree railway (Punjab), 40 miles, on the 3' 3 $\frac{3}{8}$ " gauge, are under consideration

The construction of a 5' 6' line from Sarai Kalā to Abbottabad, about 50 miles, and thence on the 3' 3 $\frac{3}{8}$ " gauge, *via* Domeli and Baramula, to Srinagar, about 160 miles (North-West Frontier Province and Kashmir), the latter section to be worked by electricity, is under the joint consideration of the Government of India and the Kashmir Darbar

The terms of concession for the construction of the following extensions of the Dacca (State) railway, *viz* —

	Gauge	Miles
(i) Myresingh, <i>via</i> Netrokona, to Bara Ari, with a branch to Gamipur (Eastern Bengal and Assam)	3' 3 $\frac{3}{8}$ '	36 $\frac{1}{2}$
(ii) Singhjuri, <i>via</i> Sherpur, to Nalitabari (Eastern Bengal and Assam)	2' 6"	25

are under consideration

Proposals for constructing a steam tramway on the 2' 0" gauge from Cawnpore to the left bank of the Jumna, opposite Hamipur (United Provinces), 35 $\frac{1}{2}$ miles, which were stated in the last report to be under consideration, have fallen through, as the promoters do not desire to proceed with the scheme on the terms offered

The following proposals, also mentioned in the report for 1904, are still under consideration —

- (i) for extending the Ahmedabad-Dholka railway from Dholka to Dhandhuka (Bombay), 40 miles,
- (ii) for constructing a steam tramway from Dhandhuka to Ranpur (Bombay), 18 miles,

together with an alternative proposal, put forward by the Bhavnagar Gondal-Junagadh-Porbandar railway administration, for extending their 3' 3 $\frac{3}{8}$ " gauge railway from Ranpur to Dhandhuka and thence to Dholka

Negotiations for the construction of the following lines have not advanced since 1904 —

- (a) a tramway or light railway on the 2' 0" or 2' 6" gauge from Kamptee to Deolapar, with a branch from Munsai to Ramteck (Central Provinces), 34 $\frac{1}{2}$ miles,
- (b) a light railway on the 2' 6" gauge from Serajganj to Ullapara (Eastern Bengal and Assam), 18 miles

The following proposals for railways to be constructed were received during 1905 —

- (i) a light railway from Samastipur to Rowsara (Bengal), 17 $\frac{1}{2}$ miles, to be financed by the District Board of Darbhanga,
- (ii) a light railway from Rowsara to Khagaria (Bengal), 44 miles, to be financed by the District Board of Monghyr,
- (iii) an extension on the 3' 3 $\frac{3}{8}$ " gauge of the Ahmedabad-Parantij railway from Idai Road to Bramhakher (Bombay), 32 miles,
- (iv) a steam tramway from Bojan to Suntak (Eastern Bengal and Assam), about 8 miles, of which about 6 miles to be on the 3' 3 $\frac{3}{8}$ " gauge and the remainder on the 2' 0" gauge

As regards (i) and (ii) the District Boards have signified their intention of withdrawing their proposals in favour of the lines proposed by the Bengal and North-Western railway from (a) Darbhanga to Khagaria and (b) from Samastipur, *via* Rowsara, to some suitable point on (ii), provided the lines are undertaken within a reasonable time Projects (iii) and (iv) are under consideration

The following proposals for railways in Aden were under consideration on the 31st December 1905 —

- (i) construction of a 2' 6' gauge line from Aden to Nobat Dakum, *via* Lahej, 40 miles,
- (ii) construction of a railway from Aden to Sheikh Othman and D'thala

A meeting of the Railway Board was held at Hyderabad in July 1905 to record the views of railway administrations interested in the proposed through metre gauge connection between the railways in northern and southern India. After a careful consideration of these views the Railway Board formulated definite proposals for carrying the scheme into effect. These are under the consideration of the Government of India.

The promoters, Messrs Wilson & Co, of the Madura District Light (Vaigai Valley) railway, have since renounced the concession granted to them for the construction of this line, in consequence of their inability to form a company and to raise the necessary capital.

In connection with a proposal of Messrs. Tata and Sons of Bombay for building Iron and Steel works near Sini, sanction was accorded to the survey, by the Bengal-Nagpur railway, of a line on the 2' 6" gauge between Gurmasam Hill in the Moulibhanj State and the Bengal-Nagpur railway near Sini, 52 miles, also to a reconnaissance for a line, about 35 miles in length, from the hill to a point on the main line between Nursingar and Chakulia. Messrs. Tata and Sons have since represented that the line should be on the 5' 6", instead of on the 2' 6", gauge. The question is under the consideration of the Government of India.

The construction of the Tinnevelly-Tiruchendur railway branch is in abeyance, pending the settlement, between the South Indian Railway Company and the Tinnevelly District Board, of terms for its construction and working.

A scheme for working both the Nilgiri railway and the Coonoor Ootacamund extension thereof by electricity has been investigated. The estimate is under consideration.

A scheme for a canal and harbour at Rameswaram having been put forward for consideration, the British Admiralty intimated that, from an Imperial standpoint, a harbour at Rameswaram would be of no strategic value. Its commercial value and the probable cost of the necessary marine works are under investigation by the Marine Department and the Government of Madras.

APPENDIX 1

List of open lines of Railway at the close of the Calendar year 1905 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification

No. See Sub head no. 1.	Name of Railway	Letters used to denote names of Railways	Railway administration by which worked	Date of first opening of any portion for traffic	Gauge	LENGTH OF RAILWAY, IN MILES, ONEW ON 31ST DECEMBER 1905, UNDER SEVERAL HEADS OF CLASSIFICATION							REMARKS				
						State lines worked by agency of		Guaranteed railway	Assisted railway	Unassisted railway	Lines owned by Native States and worked by agency of		Native State itself	Company	State railway	Lines in foreign territory	
						State railway	Company				Native State itself	Company					
5 (6)	Agra Delhi Chord	A D C	Great Indian Peninsula Ry Co	1.11.01	5' 6"	"	110.75	"									
2 (6)	Ahmedabad Dholka	A D	Bombay Baroda & Central India Ry Co	23.2.03	3' 3½"	"				33.50							
2 (8)	Ahmedabad Parantik	A P		1.5.07	3' 3½"					55.70							
11 (6)	Assam Bengal	A B	Assam Bengal Ry Co	17.93	3' 3½"		710.33				"						
	B																
24 (a)	Bardesai Basirhat Light	B B L	Bardesai Basirhat Light Ry Co	1.2.01	2' 6"					28.06						Subsidized by District Board	
23 (a)	Barsi Light	B I	Barsi Light Ry Co	1.3.07	2' 6"			"		2.03						Government land provided free	
22 (6)	Bella Sambudrug	B R	Southern Maharashtra Ry Co	17.93	3' 3½"	"	33.35										
13 (a)	Bengal and North Western	B A W	Bengal and North Western Ry Co	2.1.91	3' 3½"					901.32						Government land provided free	
13 (a)	Bengal Dooars	B D	Bengal Dooars Ry Co	15.1.93	3' 3½"	"				30.49						Subsidized by District Board	
13 (a)	Bengal Dooars Extension	B D E	Bengal Dooars Ry Co	10.4.00	3' 3½"					110.56						Government land provided free	
1 (a)	Bengal Nagpur	B N	Bengal Nagpur Ry Co	1.2.0	5' 6"	16.0 " 6											
8 (6)	Bengal Extension	B L	Nizam's Gairavatted Sat Ry Co	10.7.93	5' 6"		20.38										
11 (a)	Bhavnagar-Gondal Janjira Fortlands	B J I	Phatnagar Gondal Janjira and Portlander Ry	20.12.90	3' 3½"					331.19	"					Includes 5.23 miles of dock estate and quarry lines	
5 (6)	Bhojpur (Bistishwar)	B I		1.6.92	5' 6"		13.11										
5 (6)	Bhopal Bharat (Native State Ry Co)	B L	Great Indian Peninsula Ry Co	18.11.91	5' 6"						41.5						
5 (6)	Bhopal Ujjain	B U		11.11.93	5' 6"	"					113.47						
15 (1)	Bikaner	J R B	Jodhpur Bikaner Ry	9.12.01	3' 3½"						14.30						
5 (6)	Blasor-Goorha Baran	B G B	Great Indian Peninsula Ry Co	22.9.03	5' 6"	"						14.63					
22 (a)	Birsa Simoza	B S G	Southern Maharashtra Ry Co	1.12.93	3' 3½"						37.92						
2 (6)	Biswanath, Baroda and Central India	B B C I	Biswanath Parodi and Central India Ry Co	10.9.90	3' 6"	"	504.35									Guaranteed under old contract. Includes 39.23 miles of 3' 3½" gauge line between Viramgam and Wadhwani	
25 (a)	Bukhtiarpore Belgaum Light	B B	Bukhtiarpore Belgaum Light Ry Co	1.7.03	2' 6"				16.30							Subsidized by District Board	
12 (a)	Burma	B	Burma Railways Co	2.5.77	3' 3½"	1,310.10			"								
	C																
10 (a)	Cawnpore Burdwan (metre gauge link)	C B M	Oudh and Rohilkhand State Ry	24.11.95	3' 3½"	70.03	"										
3 (3)	Cooch Behar	C B	Eastern Bengal State Ry	16.0.03	2' 6"												
27 (a)	Cutch	C	Cutch Ry	19.5.03	2' 6"						11.60	"				Includes 0.10 mile of dock estate line	
	D																
20 (6)	Dandot Light	D I	North Western State Ry	6.7.90	2' 6"	6.18											
20 (a)	Darjeeling Himalayan	D H	Darjeeling Himalayan Ry Co	23.8.90	2' 0"					61.00						Subsidized by the Local Government	
4 (6)	Delhi Umballa Kalka	D U K	East Indian Ry Co	1.3.91	5' 6"					102.30						Subsidized by the Government of India	
16 (a)	Deoghar	D	Deoghar Ry Co	23.1.92	3' 3½"	"			4.70							Government land provided free	
					Carried over		65.73	1,057.09	504.3	1,433.12		601.40	341.10	33.60			

APPENDIX 1—contd

List of open lines of Railway at the close of the Calendar year 1905 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification

No. xx	Name of Railway	Letters used to denote names of railways	Railway administration by which worked	Date of first opening of any portion for traffic	Gauge	LENGTH OF RAILWAY IN MILE OPEN ON 31ST DECEMBER 1905 UNDER SEVERAL HEADS OF CLASSIFICATION						REMARKS		
						State lines worked by agency of		Guaranteed railway		Assisted railway		Unassisted railway		
						State railway	Company							
Main head	Sub head													
	D—concl'd			Brought forward	80 78	3 907 08	601 30	1,433 12		501 40	341 10	33 00		
14 (6)	Dhruvagadra	D H R	Bhavnagar-Gondal Junagadh Porbandar Ry	1 6-98	3' 3½"						20 83			
17 (a)	Dibru Sadiya	D S	Assam Railways and Trading Co	Aug 83	3' 3½"				77 50					Subsidized by Local Government
	E													
	Eastern Bengal State—													
	Behar Kaunia Dhubri and Northern sections													
3 (b)	British section Santrakbari extension and Banaghata Krishnagar and Teesta Kuri gram branches	E B S M	Eastern Bengal State Ry	16 7 61	2' 6'	50 03								
	Dacca section													
3 (a)	Central, Eastern and Southern sections	E B S												
4 (a)	East Indian	E I	East Indian Ry Co	15 8-54	5' 6"			1,072 30						
	G													
2 (n)	Gackwars Dabhoi	G D				6-4 73	2' 6"					91 40		
2 (e)	Gackwars Mehsana	G M	Bombay Baroda and Central India Ry Co	21 3 84	3' 3½"							92 03		
2 (b)	Godhra Butlam Nagda	G R N				16-1 93	5' 6'		141 14					
5 (a)	Great Indian Peninsula	G I P	Great Indian Peninsula Ry Co	18-4 53	5' 6"			1,561 63					"	
5 (2)	Guntakal Mysore Frontier	G M F	Southern Mahratta Ry Co	1 3 92	3' 3½"			110 60						
5 (g)	Gwallor Light	G L	Great Indian Peninsula Ry Co	2 12 99	2' 0"	"						163 63		
	H													
10 (b)	Hardwar Dehra	H D	Oudh and Rohilkhand State Ry	1 5-00	5' 6"				32 04					Guaranteed under modern contract
22 (e)	Hindupur (Yesvantpur Mysore Frontier)	H	Southern Mahratta Ry Co	15 12 02	3' 3½"							61 35		
22 (f)	Hospet Kottur	H K		1 4 05	3' 3½"			43 06						
26 (a)	Howrah Amta Light	H A	Howrah Amta Light Ry Co	1 7 97	2' 0'					37 19				
37 (a)	Howrah Shekhala Light	H S	Howrah Shekhala Light Ry Co	2 0-9	2' 0'					19 70				Subsidized by District Board
8 (c)	Hyderabad-Godavari Valley	H G V	Nizam's Guaranteed State Rlys Co	21 10 90	3' 3½"							301 13		
	I													
5 (f)	Indian Midland	I M	Great Indian Peninsula Ry Co	10 1 78	5' 6"			807 90						
				Carried over	13 0 76	9 602 61	63 0 33	1 667 66		612 23	1 154 23	33 00		
														Includes 5 82 miles of mixed (5' 6 and 3' 3½") gauge line between Hyderabad and Secunderabad over which the Nizam's Guaranteed State railway trains also work

APPENDIX 1—contd

List of open lines of Railway at the close of the Calendar year 1905 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification

NUM BER	Name of Railway	Letters used to denote names of railways	Railway administration by which worked	Date of first opening of my portion for traffic	Gauge	LENGTH OF RAILWAY IN MILES OPEN ON 31ST DECEMBER 1905, UNDER SEVERAL HEADS OF CLASSIFICATION							REMARKS		
						State lines worked by agency of		Guaran- teed rail- way	Assist- ed rail- way	Un- assis- ted rail- way	Lines owned by Native States and worked by agency of				
						State rail- way	Com- pany				Native State itself	Com- pany	State rail- way		
Main head	Sub head														
	J			Brought forward	3' 0" 70	8' 60" 61	636 33	1,564 50			612 23	1,151 23	33 60		
2 (a)	Jaipur (Sawai Ma- dhopur)	J S M	Bombay Baroda and Central India Ry Co	10-11-05	3' 3½"						32 18				
9 (b)	Jammu and Kash- mir (Native State section)	J K	North Western State Ry	15-3-90	5' 6'								15 93		
14 (c)	Jamnagar	J N	Dhavnagar Godal Junagadh Ry	8-1-97	3' 3½"						51 29				
14 (d)	Jetalsar Rajkot	J R	Porbandar Ry	12-4-93	3' 3½"						46 21				
18 (a)	Jodhpur	J B	Jodhpur Bilawal Ry	21-6-89	3' 3½"						463 80				
18 (c)	Jodhpur Hyderabad (British sec- tion)	J H	Jodhpur Bilawal Ry	18-8-02	3' 3½"	1'3 98									
38 (a)	Jorhat	J	Jorhat Ry	15-12-84	2' 0'	30 25									
1 (b)	Jubbulpore Gondia Extension	J G D	Bengal Nagpur Ry Co	18-4-03	2' 6'		223 77								
	K														
30 (a)	Kalka Simla	K S	Delhi Umballa Kalka Ry Co	9-11-03	2' 6'						60 44				
21 (b)	Karakkal Pernam	K P	South Indian Ry Co	14-3-98	3' 3½"									14 60	
9 (g)	Khushalgarh Ko- hat Thal	K K T	North Western State Ry	25-5-02	2' 6'	91 73									
6 (b)	Kolar Gold fields	K G	Madras Ry Co	1-6-91	5' 6'							9 88			
22 (g)	Kolhapur	K L	Southern Marhatta Ry Co	21-4-91	3' 3½"							20 27			
	L														
17 (b)	Leleo and Tikak Magherita Col- Hery	L T	Assam Railways and Trading Co	17-2-84	3' 3½"						8 50				
20 (b)	Lucknow Bareilly	L B	Rohilkund and Kannauj Ry Co	1° 10-81	3' 3½"		237 01							.8 66	
9 (c)	Ludhiana Dhuri Jakhai	L D J	North Western State Ry	10-4-01	5' 6'										
	M														
6 (a)	Madras	M	Madras Ry Co	1 7° 6	5' 6'			901 01							Guaranteed under old con- tract
6 (c)	Madras (North East line)	M N E	Madras Ry Co	20-2-93	5' 6'		497 10								Includes 2 66 miles of mixed (5' 6" and 3 3½") gauge line between Bezwada and Kinston Block hut and 0 31 mile of 3 3½" gauge line between Kinston Block hut and Tadepalli
19 (c)	Morvi	M R W	Morvi Ry	11-3-86	3' 3½"						73 01				
1 (c)	Mourbanj	M B	Bengal Nagpur Ry Co	21-3-87	2' 6'						15 0				
3 (c)	Mymensingh Jamalpur Jagannathganj	M J J	Eastern Bengal State Ry	23-1-03	2' 6'						32 41				
22 (b)	Mysore-Nanjangud	M N	Southern Maharashtra Ry Co	11-12-91	3' 3½"										
22 (e)	Mysore Section (Southern Mah- ratta)	M S	Southern Maharashtra Ry Co	1-2-81	3' 3½"		296 29							15 60	
	N														
2 (c)	Nagda Ujjain	N U	Bombay Baroda and Central India Ry Co	15-7-96	5' 6"							31 32			
6 (d)	Nalgiri	N	Madras Ry Co	10-6-90	3' 3½"			16 99							
8 (a)	Nizam's Guaranteed State	N G S	Nizam's Guaranteed State Ry Co	9-10-74	5' 6'							33 011			
11 (b)	Noakhali (Bengal)	N B	Assam Bengal Ry Co	15-5-03	3' 3½"						31 90				
9 (e)	North Western State	N W	North Western State Ry	13-5-61	5' 6"	3208 65									
8 (h)	Nowshera Durgai	N D		1-1-01	2' 6'	40 25									
	O														
10 (a)	Oudh and Rohilkhanda State	O & R.	Oudh and Rohilkhanda State Ry	23-4-07	5' 6"	116 05									
				Carried over	6 916 69	10 002 60	1 440 40	1 712 60	8 50	1,965 10	1 639 23	123 21	14 63		

APPENDIX 1—concl'd

List of open lines of Railway at the close of the Calendar year 1905 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification

Num ber	Name of Railway	Letters used to denote names of railways	Railway administration by which worked	Date of first opening of any portion for traffic	Gauge	LENGTH OF RAILWAY IN MILES OPEN ON 31ST DECEMBER 1905 UNDER SEVERAL HEADS OF CLASSIFICATION									REMARKS	
						State lines worked by agency of		Ganar ated railway	Assist ed railway	Un assis ted rail way	Lines owned by Native States and worked by agency of			Lines in foreign territory		
Min i n er head her e l						State rail way	Com pany			Native State itself	Com pan y	State rail way				
P																
2 (k)	Palanpur Deesa	P D	Bombay Baroda and Central India Ry Co	8 11 93	3' 3 $\frac{1}{2}$ "	916 89	10 002 80	1 410 40	1 712 50	8 60	1,266 19	1 633 23	125 21	14 65		
1 (d)	Paralimedi Light	P L L	Bengal Nagpur Ry Co	1-4-00	2' 6"		17 28	..	..			..	24 62		
2 (d)	Petlad Cambay (Anand Tarapur section)	P C A	Bombay Baroda and Central India Ry Co	5 5 90	5' 6"			..				..	21 50		
2 (e)	Petlad Cambay (Tarapur Cambay section)	P C T		20-6 01	5' 6"								10 92			
21 (c)	Pondicherry	P	South Indian Ry Co	15 12 70	3' 3 $\frac{1}{2}$ "										7 85	
20 (c)	Powayan Light	P W L	Rohilkund and Kumaon Ry Co	17 6 90	2' 0"				39 50							Government land provided free
R																
1 (e)	Paipur Dhurmtari	R D	Bengal Nagpur Ry Co	10 0-00	2' 0"		56 24									
2 (o)	Rajpipla	P	Bombay Baroda and Central India Ry Co	1 7 97	2' 6"								37 37			
0 (d)	Rajputana Bhatinda	R B	North Western State Ry	1 1 84	5' 6"								107 05			
2 (l)	Rajputana Malwa	P M	Bombay Baroda and Central India Ry Co	14 2 73	3' 3 $\frac{1}{2}$ "		1,762 38									
S																
6 (e)	Shoranur Cochin	S C	Madras Ry Co	2-6-02	3' 3 $\frac{1}{2}$ "								64 75			
4 (c)	South Bohar	S B	East Indian Ry Co	5 7 93	5' 6"										Rebate line	
21 (a)	South Indian	S I	South Indian Ry Co	15 7 61	3' 3 $\frac{1}{2}$ "		1 123 03									
22 (a)	Southern Mahratta	S M	Southern Mahratta Ry Co	2 13 84	3' 3 $\frac{1}{2}$ "		1 042 04									
0 (e)	Southern Punjab	S P	North Western State Ry	10 11 07	5' 6"				49 33							
0 (f)	Southern Punjab Extension	S P E		10-0-05	5' 6"				77 03						Rebate line	
T																
21 (d)	Tanjore District Board	T D B	South Indian Ry Co	2-4-01	3' 3 $\frac{1}{2}$ "					99 46						
2 (f)	Tapti Valley	T V	Bombay Baroda and Central India Ry Co	1 1 98	5' 6"					15 48					Rebate line	
82 (a)	Tarakeshwar Magra Light	B P	Bengal Provincial Light Ry Co	7 11 94	2' 6"					33 27						
4 (d)	Tarkessur	T	East Indian Ry Co	1 1 85	5' 0"					22 23						
33 (a)	Tezpore Balipara Light	T B	Tezpore Balipara Light Ry Co	9 8 04	2' 0"					20 10						
24 (a)	Thaton Duyinzaik Light	T D	Thaton Duyinzaik Light Ry Co	11 2-85	2' 6"					7 76					Subsidized by Local Government	
21 (e)	Tinnevelly Quilon (British section)	T Q B		1 6 02	3' 3 $\frac{1}{2}$ "		60 48									
21 (f)	Tinnevelly Quilon (Native State section)	T Q N	South Indian Ry Co	1 8-03	3' 3 $\frac{1}{2}$ "								57 93			
10 (b)	Tirkoot State	T S	Bengal and North Western Pv Co	1 11 10	3' 3 $\frac{1}{2}$ "		56 45	***								
0 (f)	Tiruppur Krishnagiri	T K	Madras Ry Co	18-0-05	2' 6"		25 39									
U																
23 (a)	Udalpur Chitor	U C	Udalpur Chitor Ry	1 8 93	3' 3 $\frac{1}{2}$ "	..					67 30					
V																
2 (m)	Vijapur Kalol Kadi	V K K	Bombay Baroda and Central India Ry Co	10-6-0	3' 3 $\frac{1}{2}$ "		***						41 37			
W																
22 (j)	West of India Portuguese	W I P	Southern Mahratta Ry Co	17 1 67	3' 3 $\frac{1}{2}$ "										51 10	
*																
Total mileage of railways open in India and Burma on the 31st December 1905																
				5 6	4 931 85	823 36	1 410 40	9 91 21				70 0 01	201 69		73 60	
				3 3 1	71 60	7 511 35		1 43 71				814 38				
				2' 6	187 01	310 39		109 29				159 89	33 60			
				2' 0	30 43			107 04				183 63				
				Total	916 89	14 065 10	1 410 40	9 93 18	41 77	1 333 49	1 806 74	235 20		73 60		

APPENDIX 2

Mileage added to the Railway System of India during the Calendar year 1905 and the four months following

NUMBER	Main head	Sub head	Railway administration to which railway has been added	Name of owning railway	Section of line added during 1905	Date of opening for traffic	ADDITIONS, IN MILES, MADE TO OPEN MILEAGE DURING 1905						
							Length				Total mileage added to railway administration		
							5' 6"	3' 3½"	2' 6"	2' 0"	5' 6"	3' 3½"	2' 6"	2' 0"
1	(b)	Bengal Nagpur	Jubbulpore-Gondia Extension	Burgi to Howbagh Jabalpur	7th April 1905				16 16				
				Howbagh Jalalpur to Jubbulpore	15th September 1905				1 09				
	(c)		Mourbhaj	Eupsa to Baripada	20th January 1905				32 41				49 66
2	(g)	Bombay, Baroda and Central India	Jaipur (Siwal Madhopur) Rajputana Malwa	Sangner to Nawai	10th November 1905	32 18							
				Phuleria to Narnaul	18th May 1905	100 5						132 71	
3	(a)	Eastern Bengal State	Eastern Bengal State	Ranaghat to Jhaganj	15th April 1905	81 35							
				Jhaganj to Bhagwalgola	15th May 1905	7 50							
			Eastern Bengal State	Bhagwalgola to Lalgaon	10th November 1905	5 90							
				Bonarpura to Kaunia	1st July 1905	44 47					94 75	41 47	
4	(a)	East Indian	East Indian	Etmadpur chord	1st September 1905	1 11							
				Shikohabad to Mainpuri	1st March 1905	29 71							
				Mainpuri to Bhongaon	17th August 1905	8 63					39 45		
5	(f)	Great Indian Peninsula	Agra-Delhi Chord Indian Midland	Delhi Sadr to Delhi Junction	1st March 1905	0 43							
				Cawnpore Generalganj line	1st March 1905	0 50							
				Centre of Agra Road station to point of junction with the Bulunganj branch	1st March 1905	0 27							
6	(f)	Madras	Tirupattur Krishnagiri	Portion of Bulunganj branch	1st March 1905	2 10					3 20		
				Tirupattur to Krishnagiri	18th September 1905		95 38						25 38
				Spezand junction to Nushki	15th November 1905	83 29							
7	(f)	North Western State	North Western State Southern Punjab 'Ludhiana' Extension	Ludhiana to Ferozepore Cantonment	10th June 1905	77 05					160 34		
				Phaphamau to Allahabad	1st January 1905	7 00					7 00	..	
8	(a)	Oudh and Rohilkhand State	Oudh and Rohilkhanda State	New entrance of the Tulsi pur branch into Gonda	1st July 1905	0 95							
				Usha Bazar to Barhni	5th January 1905	31 00							
				Sakri to Jaynagar	14th January 1905	30 47						62 42	
9	(f)	Bengal and North Western	Bengal and North Western	Merta Road to Merta City	17th January 1905	8 95							
				Bellary Raya drug Hospet Kottur	1st July 1905	33 25							
10	(a)	Jodhpur Bilawal	Jodhpur	Bellary to Rayadrug	1st April 1905	43 06							
				Hospet to Kottur							76 41		
11	(b)	Southern Maharashtra	Barasat-Basirhat Light	Barasat to Basirhat	1st February 1905		26 06						26 06
				Barsi Town to Kuslamb	15th June 1905		6 31						6 34
12	(b)	Cutch	Cutch	Anjar to Tuna	18th May 1905		11 86						11 86
				Total mileage added during 1905							304 84	324 96	119 30

APPENDIX 2—*concl.*

Mileage added to the Railways System of India during the Calendar year 1905 and the four months following

NUMBER	Main head	Sub head	Railway administration to which railway has been added	Name of owning railway	Section of line added during 1905	Date of opening for traffic	ADDITIONS, IN MILES, MADE TO OPEN MILEAGE D.U.P.I. G 1105									
							Length				Total mileage added to railway administration					
							5' 6"	3' 3 $\frac{1}{2}$ "	2' 6"	2' 0"	5' 6"	3' 3 $\frac{1}{2}$ "	2' 6"	2' 0"		
MILEAGE ADDED FROM THE 1ST JANUARY TO THE 31ST MARCH 1906																
1	(b)	Bengal Nagpur	Jubbulpore Gonai Extension	Chhindwara to Khiraadoh	15th 1906	March				16 23			16 23			
2	(e)	Bombay, Baroda and Central India	Potlad Cambay (Tarampur Cambay section)	Cambay to Cambay Bandar	1st 1906	March	1 39				1 39					
3	(b)	Eastern Bengal State	Eastern Bengal State	Golokganj to Kokrajhar	1st February 1906			35 75				35 75				
4	(a)	East Indian	East Indian	Bhongaon to Farukhabad	1st January 1906		27 49				27 49					
5	(b)	Great Indian Peninsula	Agra Delhi Chord	Kosi to Sanket	24th February 1906		6 06				6 06					
6	(t)	Madras	Morappur Dharmapuri	Morappur to Dharmapuri	18th January 1906			18 11				18 11				
9	(f)	North Western State	Southern Punjab 'Ludhiana' Extension	Ferozepore City to MacLeod Ganj	10th February 1906		77 40				77 45					
13	(a)	Bengal and North Western	Bengal and North Western	Bardhaman to Tulsipur	15th January 1906		22 54									
				Bettiah to Narkatinganj	17th January 1906		22 75									
				Bhagalpur Kachori to Barari	15th March 1906		3 0									
20	(a)	Rohilkund and Kumaon	Rohilkund and Kumaon	Narkatinganj to Bhukna Thoree	17th February 1906		21 50				70 29					
				Barilly to Soron	29th January 1906		56 00				56 00					
Total mileage added from 1st January to 31st March 1906										112 39	162 04	34 42				
MILEAGE ADDED FROM 1ST TO 30TH APRIL 1906																
12	(a)	Bengal and North Western	Bengal and North Western	Gainsari to Jarwa	12th April 1906		12 56				12 5					
GRAND TOTAL MILEAGE OPEN ON THE 30TH APRIL 1906													15,140 84			
										12,183 70		1,014 4	327 9			

APPENDIX 3

Total Railway mileage opened for traffic during and at the end of each year, and the total mileage opened during the Viceroyalty of each Governor General

CALENDAR YEAR	Net mileage added during the year	Total mileage open for traffic at close of the year	Total mileage opened during Viceroyalty	Viceroys
1853	20	20		
1854	51	71		
1855	98	169	169	Marquis of Dalhousie
1856	103	272		
1857	15	287		
1858	140	427		
1859	198	625	1,418	Earl Canning
1860	213	838		
1861	749	1,587		
1862	746	2,333		
1863	174	2,507	920	Earl of Elgin
1864	451	2,958		
1865	405	3,363		
1866	200	3,563	1,501	Lord Lawrence
1867	366	3,929		
1868	79	4,008		
1869	247	4,255		
1870	516	4,771		
1871	303	5,074	1,066	Earl of Mayo
1872	295	5,369		
1873	328	5,697		
1874	529	6,226	1,467	Lord Northbrook,
1875	315	6,541		
1876	319	6,860		
1877	460	7,320		
1878	899	8,219	2,621	Lord Lytton
1879	275	8,494		
1880	668	9,116		
1881	728	9,890		
1882	259	10,149		
1883	309	10,458	2,469	Marquis of Ripon
1884	1,173	11,631		
1885	652	12,283		
1886	609	12,892		
1887	1,211	14,103	2,945	Earl of Dufferin and Ava
1888	473	14,576		
1889	1,311	15,887		
1890	514	16,401		
1891	907	17,809		
1892	507	17,815	3,928	Marquis of Lansdowne
1893	689	18,504		
1894	396	18,900		
1895	647	19,547		
1896	707	20,254		
1897	861	21,115	3,536	Earl of Elgin
1898	925	22,040		
1899	1,483	23,523		
1900	1,229	24,752		
1901	611	25,363		
1902	568	25,981	6,255	Lord Curzon
1903	1,025	26,956		
1904	609	27,565		
1905	730	28,295		

*Capital authorized to be raised for each Guaranteed railway, State line leased to companies, and rail
31st December*

NUMBER	RAILWAYS	AMOUNT AUTHORIZED TO BE RAISED BY THE COMPANIES UP TO THE 31ST DECEMBER 1905				AMOUNT RAISED BY THE COMPANIES AND STATE OF STATE IN ENGLAND AND TO THE CROWN		
		Share Capital	Debentures	Debenture Stock	Total	Share Capital	Debentures	
Main head	Sub head					Rate of interest per cent	Amount	Cash received
2	(a) Guaranteed Bombay, Baroda and Central India	£ 7,50,000	£ 2,391,300	£	£ 9,891,300	5	£ 7,528,623	£ 2,889,299
6	(a) Madras	10,257,630	2,295,800	.	12,553,430	{ 5 43 4½ }	{ 8,757,670 9,940 £00,000 }	{ 2,292,663 }
	Total	17,07,030	4,687,100		22,49,130		17,786,258	4,681,962
	State lines leased to Companies							
1	(a) Bengal Nagpur	3,000,000	1,900,000		4,900,000	4	3,000,000	1,893,015
	(b) & (e) Do Extensions		3,650,000	"	3,650,000			3,597,196
5	(f) Indian Midland	3,000,000	3,654,100		6,654,100	4	3,000,000	3,616,431
11	(a) Assam Bengal	1,500,000	1,355,900		2,855,900	3	1,500,000	1,352,525
15	(a) Burma	2,000,000		1,250,000	3,250,000	2½	2,000,000	"
20	(b) Lucknow Bareilly section (Rohilkund and Kumawat)		147,000		147,000			160,837
22	(a) Southern Mahratta	3,00,000	1,215,000		4,215,000	3½	3,491,510	1,213,863
	Total	13,000,000	11,927,000	2,40,000	27,372,000		12,991,510	11,863,867
	Branch lines							
2	(g) Ahmedabad Dholka	86,667			86,667			
2	(h) Ahmedabad Parantij	133,333			133,333			
10	(b) Hardwar Dehra	200,000			200,000			
3	(c) Mymensingh Jamalpur Jagannathganj	140,620			140,620			
4	(c) South Behar	100,000		290,000	60,000		379,560	
2	(f) Tapti Valley	993,333		40,000	1,033,333			
	Total	1,962,973		730,000	2,292,973		379,570	
	GRAND TOTAL	£ 2,770,883	16,600,100	2,780,000	52,159,983		31,157,378	16,545,829

Details of Debenture loans on 31st December 1905 and the dates at which the loans expire

Bombay, Baroda and Central India Railway —

£	3½ p r cent	15th June 1906
140,100	3½ " "	10th July 1906
180,000	3½ " "	8th January 1907
100,500	3½ " "	10th January 1907
920,000	3½ " "	30th June 1907
500,000	3½ " "	1st April 1908
67,000	3½ " "	8th July 1908
109,600	3½ " "	7th November 1908
300,910	3½ " "	1st January 1909
306,000	3½ " "	5th May 1910
55,000	3½ " "	8th July 1910
100,670	3 " "	1st February 1911
120,000	3½ " "	
2,931,370		

Madras Railway —

£	3 p r cent	30th June 1906
111,000	3 " "	30th June 1906
140,000	3 " "	31st December 1906
145,000	3½ " "	30th April 1907
100,000	3½ " "	30th June 1907
51,200	3½ " "	31st October 1907
200,000	3½ " "	31st December 1907
81,400	3½ " "	31st December 1907
52,300	3½ " "	31st December 1907
171,400	3½ " "	30th June 1910
62,300	3½ " "	31st December 1910
80,000	3 " "	1st August 1910
80,000	3 " "	31st December 1910
500,000	3½ " "	19th May 1911
293,700	3½ " "	30th June 1911
2,295,800		

Capital expenditure in thousands of rupees

Number	Railways (including branches worked)	EXPENDITURE ON NLW LINES IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC, NOT FINALLY CHARGED OFF IN THE ACCOUNTS									
		YEARS									
		1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
1 (e) to (e) and (g)	Bengal Central										*
	Bengal Nagpur	62,32	1,71,83	1,71,20	1,67,01	79,14	40,25	1,42,51	1,17,84	1,02,23	66,63
2 (e) to (f) & (n) & (o)	Bombay, Baroda and Central India	18,76	16,82	49,66	60,95	24,05	13,72	9,76	21,43	7,56	1,02
3	Eastern Bengal State	4	3,00	13,89	29,15	31,10	40,07	45,92	30,68	39,18	37,15
4	East Indian	18,06	80,80	1,07,94	68,09	39,09	33,15	29,67	18,49	91,17	1,20,65
5	Great Indian Peninsula	27,30	65,88	80,87	67,71	18,77	2,10	4,12	26,13	60,16	16,17
6 (e) to (f) & (g) & (i)	Madras	24,41	10,91	7,47	11,38	20,80	54,50	80,56	60,42	37,51	47,77
7	Nagda Muttra									1,75	21,80
8	Nizam's Guaranteed State		15,32	40,79	78,37	87,06					
9 (e) to (j)	North Western State	2,13,51	1,26,66	62,21	41,82	41,48	54,63	42,91	30,67	1,21,56	1,02,78
10	Oudh and Rohilkhand State	23,03	39,88	23,72	39,27	27,17	9,30	20,61	54,52	30,78	29,13
11	Assam Bengal	1,11,06	1,09,69	1,35,83	1,05,81	97,65	68,10	71,84	47,63	13,50	62
12	Bengal and North Western	32,03	1,01,74	62,86	70,00	28,89	39,86	26,15	12,63	46,76	45,07
13	Bengal Dooars		72	1,86	7,98	18,19	15,61	15,56	8,50		
14	Bhavnagar-Gondal Junagadh Porbandar	9,24	9,30	5,43							
15	Burma	43,40	89,67	43,29	62,52	50,63	56,42	35,77	*	3,39	42,25
16	Deoghar				*						
17	Dibru Sadiya										
18	Jodhpur Bikaner	23	10,01	26,10	4,66	6,61	4,00	6,77	...	89	1
19	Moryi					2,32	11	3	65	46,21	7,16
(g) to (m)	Rajputana Malwa	18,44	12,09	8,59	2,67	59	21	1,07	5,63	35,80	26,36
20	Rohilkund and Kumaon	4					3	43	83	9,71	33,18
21	South Indian	53	5,19	-21,05	2,70	14,00	26,50	73,39	56,12	27,81	7,14
22	Southern Mahratta								2,56	12,60	2,78
23	Udaipur Chitor	18	26	1,13	2,16	45	21				
24	Barnasat Basirhat Light									5,69	1,33
25	Barai Light									23	7,92
26	Bukhtarpore-Bihar Light								5,30		
27	Cutch								22	1,35	"
28	Dholpur-Bara									"	2,04
29	Dwara Theria Light								8,24	1,39	82
30	Kalka Simla				3,39	4,51	23,53	40,90	50,90	21,40	4,34
31	Banaghata Krishnagar Light	"	1,01	5,01	5				.	‡	
32	Tarakeshwar Magra Light								16		
33	Torapore Balipura Light										
35	Darjeeling-Himalayan										
36	Howrah Amta Light	3,62	4,01	29	5	1	8		20	2,79	
37	Howrah Shealkhala Light	1,31	2,81	33							
38	Jorhat	"									
	TOTAL	6,07,51	8,30,83	8,27,93	8,76,84	5,42,51	5,03,52	6,11,46	5,01,89	6,60,57	7,22,43

DIX 7.

during each of the past 10 years

EXPENDITURE ON ROLLING STOCK IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS										REMARKS	
YEARS											
1896	1897	1898	1899	1900	1901	1902	1903	1904	1905		
...	11 59	4 37	1,95	27	3	4	15	*	*		
2,26	32	1,13	33,92	27,85	4,29	57,16	34,13	40,61	57,18		
2,08	24	6,00	13,84	13,34	4 24	2,51	7,97	8,26	1,48		
7,30	16 63	10,52	18,21	4 57	13,01	18,12	35 25	15,25	25,14		
12,02	27,27	36,92	1,66,52	64,81	73,57	54 29	17,91	26,98	30,13		
2,40	7,85	1,63	8,27	13,36	21,27	12,27	31 84	37,89	12,63		
1,65	6,57	1,47	3,66	3,26	10,11	25,43	16 44	6,24	7,49		
+											
2,22	49	3,06	12,80	12,67	1,51	5,86	3,05	72	51		
10,63	36,32	21,85	5,70	79	12,30	22,21	14,34	13,91	28,56		
59	3,51	7,06	5,68	79	5,85	17,93	23 91	7,58	6,92		
16,29	4 25	2,65	1,63	87	3,05	7,69	9,86	6,32	4,79		
2,25	9,98	24,03	15,84	18,53	18 47	12 49	18,33	3,48	14,09		
1	52	1	4,09	2,32	1,40	7	25	5			
1,80	67	1,21	8	16	80	35	55	-1,05			
8,80	1,50	6,36	11,96	4,74	20,85	26,60	19,57	12,20	6 61		
78	14	20	16	2,52	1,13	"	9	4,47	19		
39		6,08	11,14	22	2,22	1,93	4,22	1,36	71		
24	2	12	4	6	10	-12	-22		3,00	† Represents Expenditure on conversion of the existing line from 2' 6" to 3 3/4' gauge	
2,15	-12	-1,59	3 07	1,83	89	8,70	8,19	3,85	10,09		
18	2	2,42	1,02	3,39	2,06	6 86	6,11	1,38	77		
29	1,22	43	73	26	-3	1,46	2,96	1,27	14,75		
45	1,40	5 34	3,42	1,44	1,88	26	85	80	18,58		
2,25		5			42			2,03	"		
2,49	1,77	27			-39			2 17	23		
"		"						12	12	10	
		"								50	
						1,07	3,93	2,85	4,96		
		1,20	"	24						‡ Purchased by the State from the 1st July 1904 and incorporated with the Eastern Bengal State Railway	
		1	18					1	1	8	
18		6	12								
24	2	-25	54	-16	1	9	41	70	12		
1,03	1,26	99	11	46		72		30			
	1,17	48	"			"		3			
-7	88	20			-31	4	12	2			
78,70	1,37,44	1,13,71	2,67,03	1,77,67	1,98,73	2,84,05	2,62,51	1,92,38	2,60,17		

Capital expenditure in thousands of rupees

Number	Railways (including branches worked)	EXPENDITURE ON IMPROVEMENT OF EXISTING LINES IN THOUSANDS OF RUPDAS EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS									
		YEARS									
		1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
	Bengal Central	69	86	2,15	75	1,66	1,18	1,15	73	43	
1 (a) to (e) & (g)	Bengal Nagpur	10,08	3,56	57	25	1,68	3,37	1,61	3,8	5,66	5,20
2 (a) to (f) & (n) & (o)	Bombay, Baroda and Central India	23,86	28,68	15,33	86,60	8,12	21,71	9,89	5,71	4,63	2,74
3	Eastern Bengal State	18,06	27,03	7,04	8,72	13,85	11,37	15,46	23,66	49,13	1,08,70
4	East Indian	10,75	19,82	28,99	40,76	48,92	64,24	59,03	41,88	46,44	63,52
5	Great Indian Peninsula	6,09	4,97	8,04	6,71	10,98	11,65	17,01	23,56	6,479	73,48
6 (a) to (f) & (g) & (t)	Madras	4,07	8,30	3,16	2,43	3,93	9,33	1,56	5,91	11,26	13,47
7	Nagda Muttra	...								...
8	Nizam's Guaranteed State	83	3,15	1,24	-105	2,78	6,53	8,14	3,76	2,97	2,76
9 (a) to (j)	North Western State	30,47	28,30	16,92	20,8	19,10	11,67	49,11	22,42	30,91	33,14
10	Oudh and Rohilkhand State	2,61	4,01	4,38	9,71	8,30	9,45	12,75	12,40	19,80	19,62
11	Assam Bengal										12,03
12	Bengal and North Western	49	2,86	5,05	6,63	12,21	7,19	25,66	21,79	29,01	16,81
13	Bengal Dooars	84	1,08	53	38	16	2	5	21	5,55	3,54
14	Bhavnagar Gondal Junagadh Perbandar	1,03	73	2,10	91	31	16	40	3	3	21
15	Burma	17,27	6,21	5,09	11,31	25,11	22,05	7,91	20,73	21,11	17,60
16	Deoghar			1	-1						23
17	Dibrus Sadiya	-25	2,41	7		6	7,20	23	32	22	27
18	Jodhpur Bikaner	13	7	6,30	-81	-1,58	3,16	3,77	62	56	12
19	Morvi	10	49	7	5	-16	1			-1	-13
2 (g) to (m)	Rajputana Malwa	5,14	2,65	3,32	3,98	3,53	8,20	13,68	9,18	8,62	13,93
20	Rohilkund and Kumaon	2,56	1,71	79	21	1,15	1,02	66	1,59	1,56	65
21	South Indian	1,01	76	1,52	8,59	3,03	3,83	1,16	3,10	6,64	8,11
22	Southern Mahratta	4,01	5,60	6,20	7,60	5,79	1,59	3,29	2,98	2,26	5,49
23	Udaipur Chitor						10	4	1		1
24	Baraset Basirha Light										
25	Barsi Light							7			-4
26	Bukhtiarpore Behar Light									39	1
27	Cutch										
28	Dholpur Bari										
29	Dwara Theria Light										
30	Kalka Simla										
31	Ranaghata Krishnagar Light										
32	Tarakeshwar Magra Light			1	1		2	5	6	3	5
33	Tezapore Balipara Light	9	3	1	5	13					
35	Darjeeling Himalayan	42	98	49	25	10	21	12	31	4	16
36	Howrah Amta Light									14	16
37	Howrah Sheal hala Light								2		-1
38	Jorhat	10			4		17	3			
	TOTAL	1,45,41	1,48,49	1,22,09	1,59,64	1,68,79	2,11,55	2,35,35	2,01,98	3,15,13	4,02,55

DIX 7—concluded

during each of the past 10 years.

TOTAL CAPITAL EXPENDITURE IN THOUSANDS OF RUPEES INCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS

YEAR										REMARKS
1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	
4,59	10,29	6,90	8,01	34	2,59	1,58	76	—36		
1,16,54	1,99,23	1,62,45	1,98,57	75,81	77,61	1,76,45	1,91,63	1,19,83	1,19,67	
54,14	78,06	89,09	98,92	28,58	56,65	29,50	19,61	9,62	7,90	
27,91	51,23	85,51	56,49	49,25	66,77	61,52	1,19,34	1,09,61	2,08,13	
70,12	1,41,83	1,66,07	2,18,13	1,62,49	1,11,12	1,45,82	1,89,68	1,45,03	2,33,23	
51,02	71,81	70,51	78,98	53,32	44,51	23,58	1,16,21	1,76,71	1,02,30	
27,45	19,63	12,65	19,27	55,11	63,58	60,36	86,09	72,11	69,17	
										1,73
										46,84
1,85	18,30	60,82	98,90	32,94	18,40	15,84	5,73	5,26	6,53	
2,67,14	1,66,19	62,47	66,46	83,47	93,87	1,30,10	69,58	2,09,09	2,72,27	
40,23	14,90	33,16	55,60	30,26	32,76	76,47	87,45	53,06	41,37	
1,17,01	1,11,23	1,18,74	1,13,15	86,46	85,47	69,86	53,24	10,81	18,24	
35,45	1,68,10	70,76	70,13	55,01	48,78	63,17	53,92	79,38	90,01	
1,07	2,17	4,25	22,26	19,77	15,23	10,45	7,09	5,35	3,56	
14,18	8,67	8,93	92	17	96	44	67	—1,40	—34	
82,45	59,87	51,62	86,24	92,70	95,26	71,01	81,03	36,97	84,20	
		1	—1			—9				23
53	2,80	27	17	2,57	8,32	1,73	41	4,69	46	
48	10,12	39,36	18,01	4,89	19,78	6,64	—57	2,21	1,60	
—17	94	3	27	2,92	31	—26	56	6,18	9,85	
11,16	—2,83	9,43	10,59	17,19	12,71	22,33	30,53	43,71	39,23	
2,61	3,79	2,10	13	5,37	4,31	12,02	4,60	19,79	50,61	
—14	4,39	—10,88	7,39	17,47	47,49	99,17	52,83	31,08	23,65	
59	8,19	11,05	8,71	8,15	4,63	1,22	21,96	34,22	33,49	
18	2,51	1,18	2,16	15	82	4	1			1
										7,73
										1,33
2,49	1,77	27			—39	19				26
										14,69
										7,48
										62
										1
										1,04
										2,04
										8,24
										1,39
										16
										7,87
1,01	6,21	5	21	6,10	22,96	57,95	48,51	26,93	7,87	
		2	24	—1	10	20	38	10	2	
27	3	7	17	18						
63	41	21	79	—6	23	20	72	71	14	
4,70	5,27	1,28	4	16	47	8	72	20	3,23	16
1,31	3,98	61						5		—1
37	37	7	22	—23	—8	—5	8			4
9,17,85	11,80,61	10,44,17	12,40,27	8,99,98	9,65,10	11,59,36	11,65,11	12,26,14	14,88,87	

Capital outlay on the different classes of

	Mileage		
	Open	Under construction	TOTAL
		Miles	Miles
PART I			
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH PASS THROUGH THE GOVERNMENT ACCOUNTS			
(i) — State lines worked by Companies	..		
		11,777.00	1,180.50
			15,966.50
(ii) — State lines worked by the State	.	5,916.80	385.11
(iii) — Companies' lines guaranteed under the old contracts	.	1,408.36	
(iv) — Companies' lines guaranteed under modern contracts	.	32.01	
(v) — District Boards' lines		99.46	
(vi) — Branch Line Companies, receiving rebates from traffic interchanged with main lines		371.13	
		22,606.88	1,571.61
			21,181.49
			TOTAL OPEN LINES AND LINES PARTLY OPEN
(vii) — Lines wholly under construction by State agency			198.83
(viii) — Lines wholly under construction by Companies			331.84
			TOTAL (vii) AND (viii)
(ix) — Unclassified expenditure including collieries, &c	.		
		22,606.88	2,105.28
			TOTAL PART I
PART II			
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH DO NOT PASS THROUGH THE GOVERNMENT ACCOUNTS			
(i) — Branch Line Companies, receiving rebates from traffic interchanged with main lines		537.28	77.45
			614.73
(ii) — Assisted Companies' lines—			
(a) Subsidized by the Government of India	.	162.36	
(b) Subsidized by Local Governments	.	136.26	8.50
(c) Subsidized by District Boards	.	158.00	
(d) Receiving land only from Government		1,171.77	168.60
		1,628.39	177.30
			TOTAL (ii)
		11.77	
			11.77
(iii) — Unassisted Companies' lines	.		
(iv) — Native State lines—			
(a) Worked by Native States	..	1,333.49	28.13
(b) Worked by Companies	..	1,839.76	146.83
(c) Worked by State railway agency		235.29	
		3,107.51	171.96
			TOTAL (iv)
		73.60	
		5,688.58	429.71
			6,118.29
		"	36.29
			36.29
			19.25
			19.25
			55.51
			55.51
			TOTAL OPEN LINES AND LINES PARTLY OPEN
(v) — Foreign State lines	.		
		73.60	
		5,688.58	429.71
			6,118.29
(vi) — Lines wholly under construction by private Companies	.	"	36.29
(vii) — Lines wholly under construction by Native States	.		19.25
			19.25
			55.51
			55.51
			TOTAL (v) AND (vi)
			TOTAL PART II
		5,688.58	429.71
			6,118.29
		28,295.16	2,890.53
			31,185.99
			ABSTRACT
Outlay on open lines and lines partly open—(i to vi, Part I, and 7 to v, Part II)	..		
Outlay on lines wholly under construction—(vii and viii, Part I, and vi and vii, Part II)	.	2,004.32	30,299.78
Unclassified expenditure (ix, Part I)	..	886.21	886.21
		...	

DIX 8

railways at the close of the year 1905

Capital outlay at close of 1905 (In thousands of rupees)			REMARKS
Open lines	Lines under construction	TOTAL	
2,01,99,26	4,81,44	2,05,80,70	The outlay included in Part I under "State lines worked by Companies" on account of the railways purchased by the State from the East Indian, the South Indian, and the Great Indian Peninsula Railway Companies, and under "State lines worked by the State" on account of the railways purchased from the Eastern Bengal, the Sind, Punjab and Delhi and the Oudh and Rohilkhand Guaranteed Railway Companies represents the actual Capital expenditure incurred by the Companies up to the date of purchase and subsequently by the State
69,60,53	2,56,93	92,17,46	
26,37,50		26,37,50	
29,21		29,21	
47,33	...	47,33	
3 01,84		3,01,84	
3,21,78 67	7,38,37	3,29,17 01	
	76,88	76,88	
.	1,71,90	1,71,90	
	2,51,78	2,51,78	
		95 17	
8,21,76,67	9,00,15	3,32,63,90	
2 88,22	83,37	3,21,59	
1,56,07		1,56,07	
1,21,83		1,21,83	
71,53	..	71,53	
9,96,61	53 29	9,99,90	
12,99 04	53,20	13,52,33	
27 25		27,25	
4,68,21	1	4,68,22	
12,95,14	20,63	13,15,77	
1,32,87		1,32,87	
18 96 22	20,61	19,16,86	
1,50,79		1,50,79	
30 01,52	1,07,30	37,68,82	
...	13,40	13,40	
	2,01	2,01	
	15,11	15,41	
		8,03	
36,61,32	1,22,74	37,92,34	
3,68,40,19	11,12,89	3,70,56,33	
3,58,40,19	8,45,67	*3,66,93,94	* Includes Rs 8,08,000, item (viii) of Part II
...	2,67,22	2,67,22	
.		95,17	

Capital liability on account of Railways classed

RAILWAYS	(1) SHARE CAPITAL OF PURCHASED RAILWAYS BEING PAID OFF BY ANNUITIES					(2)	(3)	(4)	(5)	(6)					
	Deduct														
	Commututed Capital representing Annuities which were purchased by creation of debt (liability included in column 3)	New Stock of Great Indian Peninsula Railway Company issued in exchange for portion of Annuity	Net capital to be paid off by Annuities	Deduct amount redeemed by Annuity payments	Net outstanding										
INDIA, GENERAL	£	£	£	£	£	£	£	£	£	£					
1 East Indian	32,750,000	7,299,157	25,450,843	2,365,126	23,085,717	7,093,949	7,719,552		8,000,300	45,899,518					
2 Rajputana Malwa (inoldg Godhra Kutch Nagda)						10,589,462				10,539,462					
3 Rewari Phulera						317,173				317,173					
4 Palanpur-Deesa						15,800				15,805					
5 Bhopal						211,796				211,796					
6 State railway stores						2,074				2,074					
7 Expenditure in England for stores purchased and remaining unappropriated						88,172			"	88,172					
CENTRAL PROVINCES															
8 Warora Colliery						88,327				88,327					
9 Umaria, " (depreciation on works)						12,178				12,178					
10 Bilaspur-Etawah						5,009				5,009					
11 Nagpur Chhattisgarh (depreciation account)						43,802				43,802					
BURMA															
12 Pegu Moulmein						341,467				341,467					
13 Henzada Kyangin						102,432				102,432					
ASSAM															
14 Jorhat						60,563				60,563					
BENGAL															
15 Eastern Bengal system	3,391,917	543,817	2,848,100	233,468	2,614,632	9,524,382	869,040			13,008,054					
16 Murshidabad Branch						561,845				561,845					
17 Dhubri Gauhati						302,708				302,708					
18 Tirhoot						3,594,888				3,594,888					
19 Tirhoot new Extensions						547,576				547,576					
20 Ranaghat Bhagwalgola						20,163				20,163					
21 Katihar-Godagari						170,670				170,670					
UNITED PROVINCES															
22 Oudh and Rohilkhand						3,939,193	10,731,610			14,670,883					
23 Agra Delhi Chord						816,462				816,462					
24 Allahabad Jaunpur						138,675				138,675					
PUNJAB															
25 North Western	11,000,124	4,911,216	9,097,903	692,457	8,405,451	29,317,241	4,190,926			41,913,618					
26 Shadra Sangla						77,195				77,195					
27 Jech Doab (southern sec.)						432,330				432,330					
28 Quetta Nushki						559,533				559,533					
29 Peshawar Railway Reserve						19,243				19,243					
30 Frontier Railway Reserve						293,212				293,212					
31 Petroleum Operations Baluchistan						7,946				7,946					
32 Jallandhar-Hoshiarpur						960				960					
33 Ludhiana Ferozepore						1,887				1,887					
34 Lo: Shulman						3,545				3,545					
Carried over	50,151,041	12,754,190	37,395,851	3,291,051	34,105,800	69,251,872	23,511,159		8,000,300	134,869,130					

DIX 9

as State railways at end of 1905

RAILWAYS	(1) SHARE CAPITAL OF PURCHASED RAILWAYS BEING PAID OFF BY ANNUITIES						(2)	(3)	(4)	(5)	(6)					
	<i>Deduct</i>		New stock of Great Indian Peninsula Railway Company issued in exchange for portion of annuity	Not capital to be paid off by annuities	Deduct amount redeemed by annuity payments	Net out standing										
	Commuted capital representing annuities which were purchas- ed by creation of debt (inability included in column 3)	Commuted value of stock purchased														
	£	£	£	£	£	£	£	£	£	£	£					
Brought forward	50,151,041	12,754,190		37,396,651	3,291,051	34,105,600	69,251,872	23,511,158		8,000,800	134,869,130					
55 South Indian (including Pamban Branch)						"	1,955,959	4,726,168		1,425,000	8,107,127					
36 Tinnervelly Quilon (British section)							24,813			263,654	288,467					
37 Tinnervelly Quilon (Native State section)							72,521			711,346	783,870					
38 Azhikal Mangalore							652,067				652,067					
39 North East line, Madras railway, East Coast Railway, south run section)							4,835,576				4,335,576					
40 Nilgiri							245,976				215,976					
41 Bezwada extension							78,576				78,576					
42 Guntalal Mysore frontier							304,790				394,790					
43 Tanjore District Board							104,189		79,321	41,047	314,507					
44 Vizagapatam Raipur							16,336				16,336					
45 Hospet Kottur							92,109				92,109					
46 Bellary Ravadrag							51,345				51,345					
47 Tirupittur-Krishnagiri							70,913				70,913					
48 Morappur Dharmapuri							50,816	"			50,816					
49 Coonoor Ootacamund							46,459				46,459					
50 Rameswaram Extension							21,413				21,413					
POINCAT																
51 Great Indian Peninsula	34,850,216		1,750,000	33,100,216	1,919,891	31,189,327	2,743,258	5,964,666	850,000	2,575,000	43,322,251					
52 Jodhpur Hyderabad (British section)					"		261,530				264,530					
53 Southern Mahratta (depreciation on works)							35,188				35,138					
54 Sabarmati Dholka							3,903	"			3,903					
55 Nagda Mattra							320,463				320,463					
	85,010,259	12,754,190	1,750,000	70,506,069	5,210,912	65,295,127	80,926,104	34,201,192	929,321	13,016,347	193,468,891					
LEASED LINES																
56 Assam Bengal							5,029,495				2,855,900					
57 Bengal Nagpur							2,061,962				8,530,580					
58 Burma							5,127,439				3,717,474					
59 Indian Midland											8,844,962					
60 Lucknow Bareilly							811,400				1,938,378					
61 Mysore .											6,00,11,516					
62 Southern Mahratta											1,200,000					
							1,105,228				1,200,000					
											1,200,000					
											8,057,500					
BRANCH LINES																
63 Hardwar Dehra							13,661,582				12,953,493					
											27,219,271					
											53,872,846					
TOTAL	85,010,259	12,754,190	1,750,000	70,506,069	5,210,912	65,295,127	91,590,636	34,201,192	13,897,814	40,460,328	243,433,917					

NOTE.—The premia paid in purchase of companies' lines are as under—

East Indian Railway	6,550,000	@ Rs 15 = £ 1	= 9,825,000	Rs
Eastern Bengal Railway	1,136,437	"	= 1,704,655	
Sindhi Punjab and Delhi railway	2,973,601	"	= 4,10,07,060	
South Indian Railway	959,277	"	= 1,48,39,155	
Oudh and Rohilkhand Railway	1,030,040	"	= 1,55,40,735	
Great Indian Peninsula Railway	11,839,218	"	= 22,28,88,270	

Main results of working Indian railways

YEAR	Mileage open	IN THOUSANDS OF RUPEES.				Gross earnings per mile per week	Percentage of working expenses to gross earnings	Percentage of net earnings on Capital outlay on lines wholly and partly open	PASSENGERS			Goods		
		Capital outlay	Gross earnings	Working expenses	Net earnings				Number carried in thousands	Earnings in thousands of rupees	Average rate charged per mile in pies	Quantity carried in thousands of tons	Earnings in thousands of rupees	Average rate charged per ton per mile in pies
1853	20	37,96	90	41	49	Rs 87	45.56	1.29						"
1854	71	4,00,00	2,31	1,42	89	63	61.47	0.22						..."
1855	169	5,50,00	8,13	4,55	3,58	93	55.97	0.05						"
1856	272	8,00,00	16,10	6,74	9,36	114	41.87	1.17						"
1857	287	12,00,00	25,43	10,51	14,89	170	41.45	1.21						"
1858	427	16,00,00	33,83	15,68	18,19	152	40.22	1.14						"
1859	625	23,50,00	57,24	27,74	29,50	176	48.16	1.31						"
1860	833	26,66,00	66,67	37,03	29,69	153	55.61	1.11						"
1861	1,587	34,00,00	93,63	58,09	40,54	120	55.00	1.19						"
1862	2,333	48,00,00	1,31,45	80,32	54,13	111	59.74	1.13						"
1863	2,507	55,00,00	2,20,47	1,33,04	87,43	109	60.34	1.65						"
1864	2,958	58,00,00	2,85,89	1,70,85	1,15,04	186	59.76	1.93						"
1865	3,363	63,00,00	4,22,84	2,21,27	2,01,57	241	52.43	3.20						"
1866	3,563	70,00,00	4,91,91	2,50,33	2,32,53	266	52.73	3.32						"
1867	3,929	80,00,00	5,44,54	2,93,76	2,50,78	266	53.95	3.13						"
1868	4,008	84,00,00	5,67,09	3,07,46	2,59,63	272	54.22	3.09						"
1869	4,255	89,00,00	6,13,10	3,41,74	2,71,36	277	55.74	3.05						"
1870	4,771	90,00,50	6,66,67	3,63,15	3,03,52	269	54.47	3.37						"
1871	5,074	90,00,70	6,59,20	3,67,97	2,91,23	250	55.82	3.21						"
1872	5,369	90,00,90	6,82,96	3,73,45	3,09,51	245	54.68	3.44						"
1873	5,637	91,72,60	7,22,90	3,77,85	3,45,05	244	52.28	3.76						"
1874	6,226	95,87,15	8,33,77	4,03,89	4,29,88	258	48.44	4.48						"
1875	6,541	1,00,96,28	7,91,37	3,97,18	3,93,69	238	50.23	3.90						"
1876	6,860	1,04,77,85	9,33,83	4,46,45	4,87,38	263	47.81	4.65						"
1877	7,320	1,09,04,24	12,11,28	5,98,68	6,72,60	318	44.47	6.17	"					"
1878	8,201	1,18,29,55	11,25,30	5,62,88	5,62,92	269	49.97	4.76	"					"

DIX 10

as one system from the commencement

YEAR	Mileage open	IN THOUSANDS OF RUPEES				Gross earnings per mile per week	Percent-age of working expenses to gross earnings	Percent-age of net earnings on capital outlay on lines wholly and partly open	PASSENGERS			GOODS		
		Capital outlay	Gross earnings	Working expenses	Net earnings				Number carried in thousands	Earnings in thousands of rupees	Average rate charged per mile in pies	Quantity carried in thousands of tons	Earnings in thousands of rupees	Average rate charged per ton per mile in pies
Rs														
1879	8,475	1,22,32,97	12,06,15	6,26,28	5,81,57	275	51.84	4.76						
1880	8,996	1,23,56,91	12,86,55	6,48,00	6,88,55	282	50.37	4.97	"					
1881	9,859	1,40,80,80	14,32,31	7,07,12	7,25,19	285	49.87	5.16	54,764	3,79,23	2.78	13,214	9,55,97	7.95
1882	10,069	1,43,24,42	15,35,23	7,66,81	7,68,42	294	49.95	5.36	58,876	4,08,37	2.71	14,833	10,15,97	7.91
1883	10,447	1,48,30,56	16,38,94	7,97,05	8,41,89	301	48.62	5.68	65,099	4,09,08	2.60	16,999	11,28,89	7.30
1884	11,527	1,55,45,04	16,06,62	8,15,62	7,91,00	276	50.76	5.09	73,815	4,46,84	2.56	16,663	10,56,59	7.35
1885	12,208	1,61,01,78	17,88,96	8,86,33	9,12,63	284	49.27	5.64	80,865	4,78,12	2.52	18,925	11,91,54	6.89
1886	12,865	1,70,42,89	18,70,46	8,93,10	9,77,36	285	47.75	5.73	88,436	5,09,77	2.51	19,576	12,38,59	7.02
1887	14,008	1,82,57,93	18,46,81	9,10,73	9,36,48	260	49.31	5.12	95,412	5,35,32	2.51	20,196	11,92,93	7.17
1888	14,525	1,93,04,33	19,76,45	9,87,44	9,69,01	263	49.96	5.12	103,156	5,69,06	2.71	22,893	12,79,04	6.87
1889	15,900	2,05,04,61	20,49,37	10,37,74	10,11,63	257	50.64	4.93	110,650	6,13,74	2.52	22,249	13,05,56	6.88
1890	16,401	2,13,67,04	20,67,01	10,20,89	10,36,12	243	49.87	4.85	114,082	6,25,81	2.51	22,613	12,99,52	7.11
1891	17,263	2,21,06,42	24,04,13	11,20,39	12,73,04	271	47.02	5.76	122,855	6,86,13	2.52	26,159	15,60,81	6.75
1892	17,769	2,27,30,00	23,22,93	10,90,95	12,32,58	253	46.94	5.42	127,888	6,91,15	2.52	26,335	14,77,52	6.70
1893	18,459	2,38,17,87	24,08,42	11,34,77	12,73,65	254	47.12	5.46	135,520	7,29,57	2.50	28,847	15,21,63	6.60
1894	18,840	2,37,79,01	25,50,89	11,98,40	13,52,49	262	46.98	5.69	145,727	7,57,58	2.56	32,644	16,24,82	6.42
1895	19,467	2,44,08,05	26,23,60	12,11,99	14,11,70	261	46.19	5.78	157,031	8,02,21	2.49	38,628	16,36,94	6.36
1896	20,209	2,58,05,23	25,36,14	12,17,84	13,22,30	245	47.86	4.92	159,509	8,22,07	2.45	32,471	15,41,51	6.45
1897	21,115	2,52,12,01	25,60,11	12,47,73	13,12,38	233	48.74	4.65	150,584	7,62,13	2.47	33,926	15,88,89	6.36
1898	22,024	2,62,00,20	27,41,31	12,98,08	14,42,63	244	47.87	4.94	151,566	7,58,68	2.50	35,643	17,84,97	6.00
1899	23,507	3,08,50,12	29,36,78	13,03,36	15,49,42	246	47.45	5.00	161,720	8,09,39	2.51	39,748	19,19,82	5.98
1900	<i>Revised 24,752</i>	3,29,53,34	31,54,32	15,00,31	16,45,01	245	47.85	4.99	176,308	8,95,07	2.51	42,896	20,36,52	5.83
1901	25,363	3,39,16,89	33,60,38	15,72,45	17,87,93	255	46.79	5.27	194,749	10,07,17	2.48	43,392	21,23,67	5.77
1902	25,931	3,49,77,34	33,92,69	16,70,49	17,22,20	252	49.24	4.92	196,648	10,27,48	2.51	45,537	21,23,41	5.63
1903	26,056	<i>Revised 34,11,23</i>	36,00,82	17,11,09	18,89,73	257	47.52	5.51	210,231	10,98,14	2.51	47,684	22,41,92	5.64
1904	27,565	3,52,85,95	39,64,97	18,77,50	20,87,47	277	47.86	5.91	227,097	11,76,20	2.51	52,051	25,18,61	5.39
1905	28,295	3,66,93,94	41,68,09	19,94,00	21,74,09	283	47.84	5.92	249,157	12,73,83	2.47	54,936	26,20,71	5.19

APPENDIX
Summary of the general
Indian Railways

Calendar year	GENERAL RESULTS			
	Total Capital outlay in thousands of rupees	Gross earnings in thousands of rupees	TOTAL WORKING EXPENSES	
	1	2	3	4
1901	3,39,16,89	33,60,38	15,72,45	46 70
1902	3,49,77,34	33,92,69	16,70,49	49 24
1903	3,41,11,23	36,00,82	17,11,09	47 52
1904	3,52,85,95	39,61,97	18,77,50	47 35
1905	3,66,03,91	41,68,09	19,94,00	47 84

Calendar year	COACHING TRAFFIC								GOODS		
	1st class	2nd class	Intermediate-class	3rd class	Season and vendors tickets	Other Coaching Traffic	Total Coaching Traffic (sum of 15 to 20)	Total Goods Traffic (sum of 23 to 27)	General merchandise	Coal and coke for the public and foreign railways	
	14	15	16	17	18	19	20	21	22	23	24
1901	32,78	52,43	64,39	8,48,25	9,32	1,34,71	11,41,88	21,23,67	17,53,14	2,35,01	
1902	38,57	56,59	67,60	8,54,97	9,75	1,47,60	11,75,08	21,23,41	17,40,72	2,26,75	
1903	41,56	58,13	71,68	9,16,31	10,46	1,56,26	12,54,40	22,41,92	18,53,45	2,29,93	
1904	40,76	59,78	74,84	9,89,63	11,19	1,61,36	13,37,56	25,18,81	20,85,56	2,56,13	
1905	45,12	64,66	83,06	10,68,76	12,23	1,64,69	14,88,52	26,20,71	21,32,22	2,89,19	

Number of passengers and quantity of goods carried, the average miles

Calendar year	PASSENGERS CARRIED IN THOUSANDS, THE AVERAGE MILES CARRIED AND											
	1ST CLASS.			2ND CLASS			INTERMEDIATE CLASS			3RD CLASS		
	No	Average miles carried	Average rate charged per mile in pies	No	Average miles carried	Average rate charged per mile in pies	No	Average miles carried	Average rate charged per mile in pies	No	Average miles carried	Average rate charged per mile in pies
86	37	38	39	40	41	42	43	44	45	46	47	48
1901	532	92 82	12 75	2,405	76 27	5 49	6,670	59 94	3 09	170,416	41 27	2 31
1902	563	102 28	12 86	2,530	82 39	5 21	6,813	61 30	3 11	171,716	41 08	2 33
1903	594	101 71	13 21	2,580	78 13	5 54	7,214	61 64	3 09	184,292	40 94	2 33
1904	603	95 28	13 41	2,715	74 23	5 69	7,394	62 89	3 09	199,651	40 71	2 34
1905	662	98 29	13 31	2,919	72 93	5 77	8,104	63 78	3 09	218,413	40 92	2 30

DIX 11.**results of working
treated as one system****OF WORKING**

NET EARNINGS		PER MILE OPEN			PER TRAIN MILE.			REMARKS.
Amount in thousands of rupees	Percentage on Capital outlay	Gross earnings	Working expenses	Net earnings	Gross earnings	Working expenses	Net earnings	
6	7	8	9	10	11	12	13	
		Rs	Rs	Rs	Rs	Rs	Rs	
17,87,93	5.27	13,219	6,200	7,049	3.81	1.78	2.03	
17,22,20	4.92	13,084	6,442	6,642	3.67	1.61	1.86	
18,89,73	5.54	13,353	6,348	7,010	3.75	1.78	1.97	
20,67,47	5.91	14,381	6,811	7,573	3.86	1.83	2.03	
21,74,09	5.92	14,731	7,047	7,684	3.89	1.86	2.03	

The decrease in the capital outlay for 1903 is due to the revision of the capital outlay hitherto adopted for lines purchased by the State from Guaranteed Railway companies

OF RUPEES

WORKING EXPENSES IN THOUSANDS OF RUPEES			
Mil	Revenue stores, including coal and material for construction	Miscellaneous	Electric telegraph
ary stores			Steam boat and sundries
25	26	27	28
29	30	31	32
33	34	35	
14,97	96,41	21,14	7,40
87,34	3,55,93	5,59,13	1,51,90
2,63,92	1,57,85	83,72	
21,67	1,14,93	25,08	7,32
86,68	3,89,07	5,78,85	1,76,88
2,73,70	1,63,70	88,10	
23,07	1,18,90	27,31	7,81
96,66	3,88,99	6,11,95	1,52,51
2,92,19	1,68,91	96,54	
19,14	1,31,04	32,27	8,00
1,00,60	4,37,28	6,72,07	1,76,74
3,10,25	1,75,67	1,05,49	
20,63	1,46,51	33,77	8,79
1,00,11	4,81,59	7,02,38	1,84,05
3,31,02	1,86,93	1,08,03	

The totals of columns 23 to 27 are more than the figures shown in column 22 by the amount of the Cawnpore Barhwal link earnings

carried and the average rate charged, and the train-mileage run by railways in India.

THE AVERAGE RATE CHARGED				TRAIN MILES RUN (IN THOUSANDS)				GOODS TRAFFIC		
SEASON AND VENDORS TICKETS		TOTAL NO OF PASSENGERS CARRIED		Coach ing	Goods	Mixed	Total train mileage (includes motorail-train miles etc.)	Tons carried (in thousands)	Average miles carried	Average rate charged per mile in pies
No	Average miles carried	Average rate charged per mile in pies	No	Average miles carried						
49	50	51	52	53	54	55	56	57	58	60
14,726	8.63	1.41	194,749	40.42	19,701	34,274	31,561	88,265	43,392	162.75
15,026	8.85	1.41	196,648	40.03	21,708	36,019	31,781	92,527	45,537	157.54
15,351	8.75	1.48	210,231	39.90	25,889	36,808	31,438	95,960	47,684	159.93
16,729	9.08	1.41	227,097	39.63	31,577	38,797	28,620	102,721	52,051	172.42
18,029	9.16	1.42	248,157	39.90	33,491	39,712	29,692	107,045	54,936	176.60
										5.19

APPENDIX 12.

General results of working each railway system

NUMBERED		Railway	Year	Number of passengers carried (in thousand)	Quantity of goods and minerals carried (in thousands of tons)	Gross earnings (in thousands of rupees)	Working expenses (in thousands of rupees)	Net earnings (in thousands of rupees)	Percentage of working expenses to gross earnings	REMARKS
Main head	Sub-head									
5' 6" GAUGE										
1 (a), (b) and (c)	Bengal Central		1901	1,885	178	14,05	7,62	6,43	54.25	† Figures shown are only for the first half of the year. Those for the second half have been included with Eastern Bengal State railway, broad gauge
			1902	1,911	160	13,17	7,43	5,71	56.13	
			1903	1,989	206	15,09	10,01	5,08	60.36	
			1904	2,011	235	15,60	10,20	5,40	63.40	
			1905	1,070	476	16,66	16,08	1,58	176.28	
2 (a), (c) to (f), (n) and (o)	Bengal Nagpur		1901	6,108	2,212	1,30,78	69.29	61.49	52.98	51.20
			1902	6,472	2,680	1,42,18	72.80	60.79	51.20	
			1903	6,109	2,918	1,55,48	87.02	70.46	54.60	
			1904	7,715	3,391	1,80,12	93.25	95.87	19.31	
			1905	8,902	3,975	2,11,71	1,10,68	1,31,03	45.23	
3 (a)	Bombay, Baroda and Central India		1901	18,111	1,973	1,70,58	75.91	94.67	41.50	48.90
			1902	18,691	1,927	1,71,20	83.83	87.37	49.92	
			1903	19,654	1,770	1,80,76	91.73	92.03	49.22	
			1904	21,685	1,707	1,91,03	90.10	1,00,89	47.20	
			1905	23,469	2,055	2,11,73	92.17	1,10,26	43.67	
4 (a) to (d)	Eastern Bengal State		1901	13,272	1,616	94,41	48.07	46.37	50.60	48.18
			1902	13,664	1,800	1,03,93	50.03	53.90	50.27	
			1903	14,311	2,664	1,02,22	51.39	50.83	50.27	
			1904	14,680	2,690	1,08,77	57.60	50.97	53.11	
			1905	17,090	2,975	1,18,00	64.14	53.56	54.61	
5 (a)	Great Indian Peninsula		1901	23,575	10,418	7,70,48	2,57,61	4,72,57	35.27	50.17
			1902	23,236	10,484	7,01,31	2,68,60	4,15,61	36.71	
			1903	21,282	10,703	7,20,62	2,16,13	4,80,30	33.89	
			1904	23,161	12,211	7,87,26	2,60,52	5,26,41	33.89	
			1905	21,938	12,236	7,79,46	2,82,15	4,07,31	36.20	
5 (b) to (g)	Indian Midland		1901	20,103	3,213	4,18,15	2,00,83	2,17,70	45.03	50.52
			1902	18,349	3,278	4,24,25	2,12,57	2,11,38	50.17	
			1903	20,221	4,518	4,78,09	2,30,19	2,49,20	40.18	
			1904	22,434	5,092	5,86,20	2,92,3	2,97,7	19.96	
			1905	23,293	6,670	6,30,41	3,05,37	3,20,07	15.11	
6 (a) to (c)	Madras		1901	2,529	1,300	1,00,02	48.98	51.04	48.97	* Included with the Great Indian Peninsula railway
			1902	2,519	1,340	1,09,63	55.67	51.06	50.78	
			1903	*	*	1,00,33	49.65	50.05	49.52	
			1904	*	*	*	*	*	*	
			1905	*	*	*	*	*	*	
8 (a) & (b)	Nizam's Guaranteed State		1901	1,409	970	43,55	15.59	28.05	35.59	39.89
			1902	1,750	975	46,96	18.71	28.21	39.89	
			1903	1,797	695	46,26	19.33	20.93	41.70	
			1904	1,476	878	46,53	16.83	29.70	36.17	
			1905	1,583	857	46,26	15.72	30.51	33.98	
9 (a) to (e)	North Western State—	Commercial Section	1901	†	†	4,14,73	1,91,35	2,22,38	46.14	Information not available
			1902	†	†	4,17,94	2,23,99	1,97,95	53.59	
			1903	†	†	4,80,77	2,20,61	2,60,16	45.04	
			1904	†	†	6,12,74	2,63,32	3,49,42	12.97	
			1905	†	†	5,99,17	2,61,14	3,18,03	46.92	
		Military Section	1901	†	†	38,17	38,61	-44	101.15	113.16
			1902	†	†	37,69	41,97	-4,88	106.98	
			1903	†	†	39,99	41,71	-2,72	113.47	
			1904	†	†	46,00	52,19	-6,19	102.09	
			1905	†	†	43,07	43,97	-90	102.09	
		Total	1901	20,291	5,601	4,52,90	2,29,96	2,22,04	50.77	40.61
			1902	20,622	5,934	4,55,03	2,65,96	1,89,07	53.44	
			1903	22,777	6,064	5,28,76	2,62,32	2,66,44	47.89	
			1904	25,521	6,431	6,68,71	3,16,51	3,43,23	50.62	
			1905	30,017	7,237	6,42,21	3,25,11	3,17,13	50.62	
10 (a) to (c)	Oudh and Rohilkhand State		1901	8,764	1,890	1,34,68	61.42	73.26	45.60	51.28
			1902	8,332	2,302	1,34,18	68.81	65.97	51.28	
			1903	8,902	2,359	1,42,18	68.49	73.64	48.19	
			1904	9,776	2,511	1,55,60	82.95	72.65	53.31	
			1905	10,797	2,840	1,66,99	92.21	64.78	58.74	
11 (a) & (b)	Assam Bengal	3' 3½" GAUGE	1901	1,740	230	21,34	16.78	4.56	78.60	87.66
			1902	1,763	326	20,96	18.42	2.54	87.66	
			1903	1,961	403	24,28	19,58	4.70	80.64	
			1904	2,220	361	30,10	28,57	1.53	94.92	
			1905	2,476	432	34,83	33,00	1.63	94.75	

APPENDIX 12—*contd.**General results of working each railway system—contd.*

NUMBER		Railway	Year	Number of passengers carried (in thousands),	Quantity of goods and minerals carried (in thousands of tons)	Gross earnings (in thousands of rupees)	Working expenses (in thousands of rupees)	Net earnings (in thousands of rupees)	Percentage of working expenses to gross earnings	REMARKS	
Main head	Sub head										
12 (a) & (b)		3' 3½" GAUGE— <i>contd.</i>		1901 1902 1903 1904 1905	9,802 10,126 12,077 12,910 14,006	1,370 1,460 1,707 1,789 1,815	97,21 1,01,50 1,19,15 1,20,99 1,23,61	43,84 47,04 48,50 51,60 53,31	53,87 54,46 70,65 78,39 70,30	44 59 46 35 40 71 39 70 43 13	
13 (a) & (b)		Bengal Dooars		1901 1902 1903 1904 1905	316 362 443 519 486	78 91 121 171 194	4,87 5,27 6,58 7,61 8,82	2,42 2,69 3,28 3,96 4,35	2,45 2,58 3,30 3,65 4,47	49 65 51 09 49 87 52 02 49 32	
14 (a) to (d)		Bhavnagar Gondal Junagad Porbandar		1901 1902 1903 1904 1905	1,842 1,506 1,699 1,938 2,105	245 245 261 302 284	18,96 16,85 19,54 22,37 22,40	10,86 10,02 9,82 10,56 10,99	8,10 6,83 9,72 11,81 11,41	57 26 59 49 50 27 47 20 49 06	
15 (a)		Burma		1901 1902 1903 1904 1905	11,651 12,165 14,220 16,118 16,871	1,475 1,603 1,860 2,175 2,480	1,18,85 1,25,03 1,36,14 1,51,02 1,57,76	68,96 72,30 83,95 85,32 95,95	49,89 52,73 52,19 65,70 61,81	56 02 57 83 61 66 56 49 60 82	
16 (a)		Deoghar		1901 1902 1903 1904 1905	329 185 262 281 73	13 10 15 14 14	48 30 41 47 45	30 24 30 32 32	18 6 11 15 13	61 45 79 75 73 17 68 43 71 11	
17 (a) & (b)		Dibrus Sadiya		1901 1902 1903 1904 1905	290 202 299 339 353	577 510 556 613 642	9,99 9,10 9,76 10,04 10,14	5,14 4,98 5,26 5,70 5,55	4,55 4,12 4,50 4,34 4,59	51 50 54 77 53 60 56 75 54 73	
3 (b) to (d)		Eastern Bengal State		1901 1902 1903 1904 1905	* * * * *	998 1,049 * * *	76,48 80,81 85,50 89,56 89,38	37,01 39,93 41,28 50,17 44,68	89,47 40,88 41,22 39,98 44,70	48 40 49 41 51 78 56 02 49 99	# Included with Eastern Bengal State Railway (5' 6" gauge)
8 (c)		Hyderabad Godavari Valley		1901 1902 1903 1904 1905	1,176 1,216 1,183 1,264 1,591	527 587 546 349 373	20,10 22,88 22,14 22,12 29,64	10,87 13,20 13,28 14,37 16,35	9,23 9,68 8,66 7,75 13,29	54 07 57 69 59 98 64 97 55 16	
18 (a) to (c)		Jodhpur Bikaner		1901 1902 1903 1904 1905	1,467 1,378 1,560 1,702 1,970	403 456 403 439 471	22,38 25,02 27,44 30,60 35,24	12,44 13,06 13,24 13,51 14,91	9,94 11,96 14,20 17,09 20,33	55 59 52 18 48 26 44 15 42 31	
19 (a)		Morvi		1901 1902 1903 1904 1905	303 243 257 293 286	29 19 19 34 40	3,59 3,05 2,98 3,55 3,23	2,83 1,92 1,53 1,66 1,49	1,26 1,13 1,45 1,89 1,74	65 00 62 85 51 43 46 73 46 13	
6 (d) & (e)		Nalgiri and Shoranur Cochin		1901 1902 1903 1904 1905	76 89 695 724 732	16 40 156 119 105	2,41 4,44 6,28 6,83 7,02	1,03 2,59 3,56 4,28 4,92	1,38 1,85 2,72 2,60 2,10	42 87 58 23 56 58 61 87 70 09	

Included with Eastern Bengal State Railway (5' 6" gauge)

APPENDIX 12—*contd*

General results of working each railway system—contd.

Numbers		Railway	Year	Number of passengers carried (in thousands)	Quantity of goods and minerals carried (in thousands of tons)	Gross earnings (in thousands of rupees)	Working expenses (in thousands of rupees)	Net earnings (in thousands of rupees)	Percentage of working expenses to gross earnings	REMARKS	
Main head	Sub-head										
2 (b) & (g) to (m)	3' 3½" GAUGE—concl'd		1901	12,874	2,393	2,84,69	1,31,57	1,53,12	46.21		
	Rajputana Malwa		1902	12,091	2,230	2,65,04	1,25,79	1,39,25	47.46		
			1903	12,447	1,976	2,33,74	1,16,11	1,17,63	49.67		
			1904	13,194	2,117	2,41,37	1,14,80	1,26,57	47.56		
			1905	15,223	2,669	2,93,28	1,25,85	1,67,43	42.91		
20 (a) & (b)	Robilkund and Kumaon		1901	1,530	373	17,57	7,89	9,68	44.90		
			1902	1,592	482	18,64	8,76	9,88	47.00		
			1903	1,646	419	18,16	8,47	9,69	46.65		
			1904	1,673	439	10,15	8,93	10,22	46.63		
			1905	1,772	441	19,68	10,13	9,75	50.96		
21 (a) to (f)	South Indian		1901	14,035	1,689	1,05,26	49,29	55,97	46.40		
			1902	15,387	1,910	1,10,10	50,97	59,13	45.82		
			1903	17,878	3,616	1,28,85	51,81	77,04	40.21		
			1904	19,164	3,608	1,34,40	60,62	73,78	45.10		
			1905	10,383	3,105	1,41,03	69,77	71,26	49.47		
22 (a) to (j)	Southern Mahratta		1901	5,927	967	81,12	57,15	23,97	70.45		
			1902	6,397	1,016	93,17	60,65	32,52	65.09		
			1903	6,698	1,080	95,58	58,96	36,62	61.51		
			1904	7,158	1,331	1,07,95	68,50	39,45	63.16		
			1905	8,404	1,342	1,14,26	69,36	41,90	60.70		
23 (a)	Udaipur Chitor		1901	189	28	2,22	1,38	94	57.64		
			1902	179	27	2,17	1,20	97	63.31		
			1903	190	15	1,78	1,11	67	62.63		
			1904	162	11	1,51	98	53	64.86		
			1905	257	16	2,08	1,01	1,01	50.00		
24 (a)	West of India Portuguese		1901	250	74	3,68	4,17	— 49	113.20	* Included with the Southern Mahratta railway.	
			1902	*	*	*	*	*	*		
			1903	*	*	*	*	*	*		
			1904	*	*	*	*	*	*		
			1905	*	*	*	*	*	*		
25 (a)	2' 6" GAUGE.		1901	..							
			1902								
			1903								
			1904								
			1905	295	2	1,11	55	66	49.55		
26 (a)	Barsi Light		1901	77	54	1,68	89	79	52.69		
			1902	72	53	1,50	97	53	64.81		
			1903	62	45	1,30	77	53	59.23		
			1904	77	59	1,67	1,02	65	61.00		
			1905	101	82	2,19	80	1,39	36.53		
27 (a)	Bukhtarpore Behar Light		1901	"	"	"	"	"	"		
			1902								
			1903	118	7	36	21	15	57.74		
			1904	298	25	1,14	48	63	41.90		
			1905	252	19	89	53	36	59.55		
28 (a)	Cutch		1901								
			1902								
			1903								
			1904								
			1905	3	7	22	" 6	16	27.27		
29 (a)	Kalka Simla		1901								
			1902								
			1903	6	2	32	25	7	78.00		
			1904	84	25	5,90	3,82	2,08	64.41		
			1905	97	27	7,62	3,51	4,01	46.68		

APPENDIX 12—concl'd.

General results of working each railway system—concl'd.

NUMBER		Railway	Year	Number of passengers carried (in thousands)	Quantity of goods and minerals carried (in thousands of tons)	Gross earnings (in thousands of rupees)	Working expenses (in thousands of rupees)	Net earnings (in thousands of rupees)	Percentage of working expenses to gross earnings	REMARKS
Main head	Sub head									
2' 6" GAUGE—concl'd										
1	(c)	Mourbhanj	1901 1902 1903 1904 1905	30	13	31	24	7	77 42	
1	(d)	Parlakimedi Light	1901 1902 1903 1904 1905	52	4	17	27	— 10 — 1 4	155 58 106 20 85 19	
20	(c)	Powayan Light	1901 1902 1903 1904 1905	222 258 269 272 299	17 24 23 25 30	67 76 72 78 92	47 53 49 47 56	20 23 29 31 36	70 00 70 24 60 34 60 34 60 87	
		Ranaghat Krishnagar Light	1901 1902 1903 1904 1905	226 241 248 † †	1 7	69 76 86 †41 †	54 55 58 †29 †	15 21 33 †12 †	78 03 71 97 CO 86 70 24 †	+Included with the Eastern Bengal State Railway metre and special gauges
32	(a)	Tarakeshwar Magra Light	1901 1902 1903 1904 1905	419 428 427 472 456	9 11 17 23 22	83 84 85 90 87	58 59 60 62 65	25 25 25 28 22	70 23 70 52 70 40 63 25 74 71	
33	(a)	Tezapore Balipara Light	1901 1902 1903 1904 1905	116 125 145 149 155	8 8 9 8 14	84 85 95 88 103	67 63 67 71 76	17 22 28 17 27	79 84 74 53 70 72 60 48 73 79	
6	(f)	Tirupattur Krishnagiri	1901 1902 1903 1904 1905	—	2	18	14	— 1	107 69	
2' 0" GAUGE										
35	(a)	Darjeeling Himalayan	1901 1902 1903 1904 1905	74 80 109 139 137	31 33 41 44 44	7,88 8,50 9,62 10,45 9,72	4,74 4,72 5,45 5,73 5,61	3,14 3,78 4,17 4,72 4,11	60 18 55 54 56 65 53 46 57 72	
36	(a)	Howrah Amra Light	1901 1902 1903 1904 1905	763 783 808 855 940	14 14 17 13 17	2,61 2,65 2,77 2,97 3,29	1,46 1,32 1,39 1,42 1,51	1,15 1,33 1,38 1,55 1,78	56 21 49 86 50 32 47 82 45 90	
37	(a)	Howrah Sankhala Light	1901 1902 1903 1904 1905	302 314 343 346 351	4 6 7 6 6	79 82 87 86 88	55 50 52 47 50	24 32 35 39 38	70 53 61 33 59 85 54 72 56 82	
38	(a)	Jorhat	1901 1902 1903 1904 1905	76 130 155 163 167	12 12 12 10 10	83 87 91 74 79	87 90 77 78 76	— 4 — 3 14 — 4 3	105 01 104 22 85 02 105 17 96 20	

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

DIX 17

earnings therefrom during the calendar year 1905

and is therefore not the same as the total production]

III								IV		V								NUMBER.	
COTTON								Chemicals excepting salt-petre		DPUGS						TOTAL		Main head	
MANUFACTURED										1 Intoxicating other than opium		2 NON INTOXICATING							
(c) Piece goods, European				(d) Piece goods Indian				(e) Others		TOTAL				(a) Medicinal preparations		(b) Others			
Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings		
Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs		
8707	103,304	5,726	85,133	5,110	22,591	24,078	29,22,310	5,7	9,600	32	824	72	1,030	1,8,9	17,357	1,903	18,312	1	
16,781	350,321	10,203	297,694	1,110	22,591	24,078	29,22,310	5,7	9,600	32	824	72	1,030	3,793	51,456	3,399	53,910	2	
26,152	6,600	2,033	17,693	2	26	33,108	3,30,642	1,001	9,312	116	2,738	84	1,206	602	11,332	1,004	15,276	3	
59,585	15,23,037	7,633	1,10,668	1,743	19,619	171,210	29,77,317	4,003	76,811	101	1,721	64	2,350	3,563	42,452	4,370	69,583	4	
33,630	9,22,070	13,990	73,356	1,485	40,023	490,352	1,18,04,200	1,512	4,373	188	4,492	277	11,552	3,022	75,823	3,497	91,806	5	
7,812	1,01,630	0,267	1,01,860	100	1,093	75,477	7,68,098	363	6,319	10	805	233	7,531	2,974	31,067	3,167	41,006	6	
2,036	49,202	1,014	11,593	70	918	16,610	1,71,551	133	2,100	30	473	103	1,017	1,027	8,246	1,166	10,016	8	
18,764	0,08,593	37,033	7,73,382	1,235	27,334	172,162	29,82,369	3,983	74,937	46	7,631	617	21,071	8,415	9,514	1,43,340	9		
0,101	63,187	5,731	43,021	370	3,725	50,913	3,28,486	275	1,068	106	2,460	237	2,130	892	8,470	1,235	13,366	10	
2,6,8	26,376	231	2,764	18	274	5,571	45,006	233	1,681	11	250	99	1,126	379	2,170	480	3,555	11	
18,021	170,708	5,61	54,500	351	4,303	31,063	3,29,680	1,334	5,610	96	2,06	90	516	18,133	8,083	18,393	61,075	12	
479	3,111	46	396			562	4,017						*	264	3,459	261	3,450	13	
671	4,5,2	1,203	0,110	10	71	19,62	1,12,738	67	774	23	316	61	647	78	504	162	1,497	14	
7,003	1,15,149	310	7,331	2	11	17,800	2,30,704	122	2,764			108	2,380	204	3,236	302	5,613	15	
210	67	11	4	22	7	278	68					512	7,452					16	
						116	1,472											17	
822	11,230	1,212	17,910	5	93	31,138	4,51,831	21	351	11	105	20	353	41	589	72	1,137	8	
1,104	8,323	2,136	15,032	57	67	18,602	04,600	77	914	8	125	21	336	297	2,677	316	3,138	18	
237	1,153	335	1,315	25	69	1,516	8,6,6	130	1,314	2	30	11	122	213	1,571	256	1,673	6	
76	310	147	678	4	23	1,643	10,550	14	72	161	673	10	93	50	197	221	863	19	
10,601	10,93,300	16,300	3,33,403	1,018	25,610	150,230	23,13,212	270	5,159	141	2,987	30	884	1,003	33,412	2,076	37,283	2	
173	2,746	1,953	13,510	44	30	3,830	22,433	73	618	50	532	3	46	1,205	9,316	1,78	9,834	20	
8,0,1	11,079	4,715	41,823	15	1,382	58,00	4,45,437	146	2,680	61	417	453	5,310	2,085	17,027	2,599	22,818	21	
1,078	79,820	0,070	60,410	59	8,070	11,303	8,90,037	601	8,317	49	514	231	3,188	510	6,945	870	10,647	23	
218	1,671	435	3,522	13	100	~500	13,261			5	51		1	10	363	51	415	23	
																		24	
237	823	191	503	13	42	9,003	~5,901	16	19			2	5	87	104	39	109	25	
						64	373					*		1	2	1	2	26	
1	21	105	4,378	210	3,603	420	8,111			2	54	101	1,902	16	3,37	110	2,373	30	
24	72	2	9			30	87	1	2					3	12	3	12	1	
15	15	20	21			267	176	3	3					26	23	26	23	23	
122	210					122	210					10	78					20	
85	217					85	217											33	
						9	67					10	78					33	
400	10,0,0	91	3,112	36	075	6,63	18,701					137	2,700	23	600	165	3,680	35	
																		36	
																		37	
																		38	
21,503	49,34,383	113,867	73,46,000	8,037	1,8,873	1,879,382	2,81,00,15,	15,611	~8,070	2,21	37,50	3,70	57,721	61,421	29,116	57,250	6,68,672		
23,507	46,1,033	135,561	22,63,930	7,600	1,66,722	1,593,0,1	2,30,38,131	13,773	2,33,014	2,470	38,607	3,221	83,834	41,612	5,02,210	50,926	6,74,411		
10,0,0	1,98,102	8,071	62,677	1,0,6	10,167	211,809	53,03,303	1,833	2,006			491	8,803	6,782	6,733	7,021	33,931		
												230	110						

earnings thereof from during the calendar year 1905.

railways in India and is therefore not the same as the total production.]

VII						VIII		IX—(continued on following page)								Number
FODDER						Fruits and vegetables, fresh		GRAIN AND PULSE								Main head
(1) Oil cake	(2) Hay straw and grass		Total				(1) Gram and pulse		(2) Javir and Bajra		(3) Rice in the husk		(4) Rice not in the husk		Main head	
Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	
Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	
1,630	20,630	2,988	11,635	7,118	32,545	9,253	64,702	121,745	10,427	2,234	5,401	67,718	2,076	345,060	22,775	504
5,453	67,651	85,619	4,93,656	105,102	5,60,710	33,603	194,920	77,779	4,12,797	63,203	2,02,847	7,1,7	41,520	51,331	3,90,637	2
0,377	10,991	17,315	29,153	2,602	49,114	13,169	51,661	73,914	2,40,999			63,616	2,37,773	97,376	2,03,466	3
32,603	1,53,169	21,906	70,273	51,711	2,21,062	9,855	1,20,503	240,41	14,78,086	37,363	1,81,514	23,712	81,01	943,171	10,30,593	4
27,121	1,60,172	48,403	2,40,663	75,529	1,03,033	10,011	1,60,643	202,730	16,39,710	2,61,903	23,61,040	2,631	10,935	11,765	8,71,37	5
12,415	62,339	9,782	21,140	21,107	73,497	23,929	1,60,392	100,743	5,98,921	106,416	6,54,907	160,013	7,00,2	266,577	14,55,197	6
1,200	7,400	2,410	6,399	3,610	13,889	2,672	23,611	22,492	93,815	35,450	1,56,908	500	4,505	20,641	1,42,306	6
10,274	44,510	51,546	2,03,147	61,670	2,52,637	23,201	1,62,889	203,689	18,59,778	163,704	13,07,041	29,774	93,361	141,480	9,64,045	9
3,817	17,010	10,574	31,751	14,371	49,773	13,411	50,121	91,622	3,92,102	14,720	50,143	5,767	26,143	47,121	1,90,637	10
2,741	1,458	1,011	3,019	3,752	14,537	1,570	6,803	4,108	26,704			18,690	72,351	44,657	2,36,603	11
7,221	23,066	7,210	2,6,7	14,410	51,623	7,460	27,6,0	78,9,0	2,86,707	2,691	7,110	39,001	1,18,450	2,61,436	11,76,968	12
120	961	165	933	803	1,063	32	2,3	3,10	8,763			1,434	2,801	6,524	21,55	13
62	4,623	4,501	18,114	6,356	23,012	5,30	21,543	6,190	19,108	36,976	1,10,351	40	86	11,212	43,249	14
2,070	10,302	683	4,159	2,91	11,520	25,924	1,69,763	20,510	1,39,85	1,620	12,900	697,07	31,23,410	78,104	3,47,37	15
0	2	"	"	9	2			500	110			40	13	50	14	16
5,130	20,633	62	2,9	5,217	20,972	2,66	2,072	18,800	1,18,603	21,902	1,68,509	103	210	10,921	53,93	6
107	567	8,564	10,670	8,761	17,142	1,242	6,950	8,850	5,9,068	72,316	3,07,997	1,803	7,00	41,612	1,89,617	18
324	978	40	220	873	1,207	678	1,907	2,132	8,812	113	177	2,015	4,330	19,70	40,714	6
3	10	123	364	131	374	177	663	1,681	3,819	3,493	6,133	10	22	33	64	10
7,017	23,336	21,810	79,203	2,766	1,07,634	29,400	2,52,607	147,034	16,11,721	139,063	14,55,075	4,111	26,033	68,930	4,60,603	2
300	1,160	1,419	7,73	1,618	8,039	3,603	25,350	32,900	60,13	5,311	13,443	4,914	14,883	8,782	18,057	29
30,847	1,83,319	4,322	30,573	44,369	1,60,511	40,691	2,03,956	67,550	3,39,052	3,5,334	2,70,698	167,006	5,91,990	6,0,062	4,18,163	21
14,313	44,018	7,156	30,839	21,460	81,6,6	9,964	55,378	69,510	3,43,607	109,003	5,9,915	15,041	5,4,057	6,6,491	4,60,811	22
8	2	160	264	168	289	115	660	949	3,767	11	57	1	6	849	3,155	23
					"											24
120	272	1	3	130	275	44	123	6,553	14,015	15,173	30,180	273	579	1,039	2,337	25
"	"	"	"	"	"			100	3,1	3,163	10,697	"		3	116	26
110	1,624	210	2,887	265	4,411	113	2,313	1,468	17,167	24	313	61	737	6,75	7,0,7	33
1	3	18	60	19	63	1"	49	25	69			21	30	1,001	2,814	1
67	52	"	"	67	52	83	71	912	606	8	0	3,03	2,414	2,920	2,704	1
1,007	1,731	6	8	1,513	1,713	1,560	1,010	113	111	"		1,516	1,200	135	133	33
655	1,734	"	660	1,794				303	1,478	"		338	1,3,06	"	"	33
35	339	15	241	50	580	121	2,637	1,070	12,509	"		23	171	12,636	1,60,441	35
"	"				"			"	"			"	"	"	"	36
"	"				"			"	"			"	"	"	"	37
"	"				"			"	"			"	"	"	"	38
10,031	8,31,663	310,013	13,65,057	613,944	21,80,720	2,6,655	18,39,7,2	1,691,088	1,08,69,2	1,160,333	20,53,038	1,300,750	8,89,665	2,049,108	11,30,426	
4,57,103	6,69,514	213,033	10,71,600	370,738	17,61,1,0	251,561	16,72,167	465,187	0,8,745	741,397	40,01,008	1,49,041	18,08,692	1,702,833	0,23,494	
37,926	1,42,149	106,230	2,63,451	144,206	4,76,000	25,094	2,17,685	226,501	12,76,510	429,006	30,02,030	210,818	10,71,7,3	266,2,0	17,06,032	

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

NUMBER	Main Head	Sub head	Railway system, vid Appendix I	I								HIDES	
				GRAIN AND PULSE—concl'd									
				(5) Wheat		(6) Wheat flour		(7) Others		Total			
				Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	(a) Dressed or tanned	
				Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	
			5' 6" gauge										
1	(e) (b) & (e)	Bengal Nagpur		136,107	13,10,184	4,275	27,390	3,916	11,933	69,961	49,80,043		
2	(a) (c) to (f) & (v) & (o)	Bombay Baroda and Central India		98,333	5,69,031	6,574	51,414	3,4,46	1,51,614	350,812	10,12,899	7 123	
3		Eastern Bengal State		4,762	13,690	7,130	72,487	4,130	18,310	270,097	7,86,774	2,0 0 8 1,16,376	
4		East Indian		3,9,521	21,29,071	36,770	3,60,231	93,316	19,400	1,03,302	49,50,081	1,638 10,490	
5		Great Indian Peninsula		257,977	10,27,305	18,6,3	1,42,693	37,164	2,04,603	911,298	81,50,004	240 5,398	
6	(a) to (c)	Madras		2,278	12,660	2,121	15,093	79,673	4,78,600	718,754	10,13,060	1,6,0 17,253	
8	(r) & (b)	Nagam's Guaranteed State		2,30	11,068	1,099	6,478	C19	3,0,1	83,133	1,18,712	0 114	
9		North Western State		1,137,386	1,40,10,670	51,903	1,39,87	112,501	6,59,126	1,9,9,430	1,91,73,331	68 631	
10		Oudh and Rohilkhand State		190,400	10,57,308	12,50,	57,723	103,697	4,70,31	4,5,901	23,43,70		
		3' 3 1/2" gauge											
11		Assam Bengal		71	378	1,80	11,353	50	360	60,930	31,763		
12		Bengal and North Western		59,510	2,10,032	3,591	4,169	1,3,392	6,3,0,0	598,94	24,33,5,0	31 203	
13		Bengal Dooars				467	1,68	1,806	7,201	13,423	42,93	214 1,302	
14		Bhavnagar Gondal Junagadh Porbandar		2,012	7,333	2,8	1,117	8,420	21,618	6,0,50	2,12,0,2	4 3	
15		Burma		278	1,700	7,611	63,000	8,186	7,037	61,905	40,73,290	140 1,708	
16		Deoghar		0	28	60	17			715	212		
17		Dibrugarh Sadiya					430	3,138	18,70	81,2,7			
8	(e)	Hyderabad-Godavari Valley		19,618	1,73,164	163	911	217	2,133	74,187	4,57,923	1	
18		Jodhpur Bikaner		3,9	1,44,29	4,218	9,142	33,4,6	2,7,01	222,54	10,76,013	16 20	
6	(d) to (f)	Madras		4	224	541	4,12	5,593	27,4,	30,934	8,0,03	17 67	
19		Morvi		530	1,761	41	102	2,143	4,0,8	8,281	10,068		
2	(b) & (g) to (m)	Papotana Malwa		161,501	11,77,352	8,534	59,713	163,4,9	10,18,723	700,633	68,78,114	29 360	
20	(a) & (b)	Pohulkund and Kumaon		39,431	10,663	1,553	5,703	32,670	92,333	120,710	3,43,840		
21		South Indian		63	3,335	1,775	4,728	21,580	1,79,054	292,000	17,14,733	853 8,3 2	
22		Southern Mahratta		45,108	1,8,110	4,64	56,735	24,0,6	93,8,	302,769	17,90,274	2 11	
23		Udaipur Chitor		1,3,9	6,712	50	278	1,861	7,173	5,108	20,078	2 5	
		2' 6" gauge											
24		Barasat Basirhat											
25		Barsi Light		0,861	21,000	9	23	52	110	32,76	70,391		
26		Pukhtarpore Pehar Light											
27		Cutch		12	41	1	4			3,338	11,703		
28		Kalka Simla		216	3,230	906	10,652	311	3,610	3,714	43,006	1 5	
1	(e)	Monbhauj				11	31	2	3	1,060	2,067		
1	(d)	Parlakimedi Light		1	9	4	1	93	79	7,254	6,003		
20	(c)	Porayan Light		2,350	3,498		170	105	2,884	5,122	7,0,6		
32		Tarakeswar Mymra								1,781	1,667		
33		Tezoore Balipara		***	**					612	2,634		
		2' 0" gauge											
34		Darjeeling Himalayan				9	1,151	20,915	296	4,497	15,181	1,58,563	2
35		Hovrah Amta											
37		Howrah Shekhola		***			***	**		***			
38		Jorhat						**					
		Total 1905		2,573,301	46,3,823	181,901	11,65,554	6,93,76	51,3,170	9,070,518	6,71,0,80	30,659 1,63,400	
		Total 1904		3,617,300	36,64,220	169,668	11,4,471	4,0,02	21,67,378	9,43,313	6,91,2,310	28,73 1,47,231	
		INCREASE				13,293	10,300	493,203	29,47,752	544,170		1,723 16,176	
		DECEASE		10,3,068	11,4,23,005						13,22,518		

DIX 17—continued

earnings therefrom during the calendar year 1905

and is therefore not the same as the total production.]

								XI		VII		XIII						NUM. BER.	
HIDES AND SKINS								Horns		Hemp (Indian), and other fibres excluding jute		(1) Raw		(2) GUNNY BAGS and cloth		JUTE			
(1) OF CATTLE		(2) SKINS OF SHEEP AND OTHER ANIMALS				TOTAL										TOTAL			
(b) Raw		(a) Dressed or tanned		(b) Raw														Main head.	
Quantity	Farmers	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings		
Tons	Rs	Tons	Rs	Tons	Rs	Tons	R	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs		
10,390	112,111		"			10,350	112,111	491	2,621	6,931	16,633	10,131	18,825	2,530	2,69,161	47,673	2,86,996	1	
1,007	17,655	8	139	3,081	31,403	4,708	5,730	81	1,371	1,627	21,211	44	7,102	11,276	79,630	11,760	80,911	2	
213	1,401	3,003	16,643	63	367	29,470	1,31,787	125	631	15,165	11,060	7,4,313	13,44	7,39,91	8,839	8,67,974	19,763	16,07,225	3
27,160	42,608	10	3,829	16,450	2,560	4,1,492	6,93,302	500	6,003	20,956	1,01,351	13,44	7,39,91	8,839	8,67,974	19,763	16,07,225	4	
4,102	67,012	39	67	12,660	1,57,607	17,006	2,30,641	1,500	22,17	9,606	1,14,818	1,391	17,150	31,790	3,30,090	33,181	3,55,115	5	
5,640	43,855	5,619	70,772	2,834	2,50,102	10,82	3,82,082	708	6,670	7,231	41,003	113	837	16,014	1,75,628	16,157	1,20,625	6	
530	4,015		5	287	21,648	2,63	26,687	300	2,657	419	3,333	5	61	2,914	21,708	2,040	21,819	8	
12,494	140,490	143	1,631	16,913	1,51,131	8,638	2,06,793	337	2,010	680	5,533	174	1,510	18,692	3,84,433	49,70	3,85,957	9	
6,128	4,339	-		3,768	17,740	9,916	60,097	400	1,73	11,052	33,804	106	1,278	12,314	71,709	12,540	73,076	10	
734	8,760			49	450	762	9,70	13	101	3,4	1,903	90,223	2,22,701	1,003	6,202	91,21	2,8,063	11	
8,073	53,385	17	132	8,750	21,246	1,773	83,03	1,24	698	1,171	4,651	3,783	24,515	17,54	1,01,438	21,378	1,3,983	12	
												12,070	*38,759	11	18	1,001	39,777	13	
148	1,030	17	177	462	2,673	631	3,915	7	43	1	4		6	1,701	5,621	1,701	5,67	14	
2,446	22,460	6	69	38	3,9	640	21,144	31	413	1	2*	14	215	17,470	69,768	17,494	70,003	15	
														50	15	60	15	16	
106	2,591	1	0	613	6,310	810	8,050	30	454	70	79		4	2,802	24,820	2,862	24,820	8	
767	6,650		6	1,300	8,45	2,02	15,330	4	20	39	170	10	1,05	3,45	14,507	3,491	14,752	18	
72	266	1	3	600	1,457	600	1,803	0	23	271	906			515	1,637	55	1,637	6	
35	116			62	208	87	324	2	13	27	103			147	400	147	400	19	
2,617	30,676	21	20	6,687	74,600	9,234	1,06,071	49	613	9,33	12,633	783	6,233	16,072	1,11,124	17,755	1,17,407	2	
1,115	5,095			593	2,298	1,63	8,091	73	360	1,90	8,39	3	19	2,904	9,602	2,927	9,711	20	
3,261	21,60	1,201	20,283	5,957	38,140	11,392	91,553	21	1,616	3,690	53,340	44	317	11,195	5,420	11,930	5,737	21	
1,782	12,760	240	1,101	9,053	61,300	11,116	78,271	438	3,041	2,30	19,016	2	20	9,010	65,132	9,012	58,453	22	
44	158			135	677	161	670	2	16	67	1	8	150	678	156	686	23		
				98	2,0	101	237	6	1,	9	27	1	3	1,200	2,001	1,230	2,001	24	
				"										7	10	7	10	25	
														32	106	30	106	27	
														10	96	105	96	1	
																		20	
																		32	
																		33	
																		35	
																		36	
																		37	
																		38	
91,597	10,33,122	10,633	1,15,635	111,050	11,16,400	217,875	24,2612	5,021	5,626	62,810	6,09,003	1,07,370	64,59,130	316,315	26,53,04	1,343,635	91,4,401		
81,056	8,86,10	94	1,03,910	83,963	8,22,493	203,768	19,59,726	5,200	53,000	67,156	4,95,374	1,02,403	60,96,622	314,201	27,7,127	1,339,604	89,70,740		
9,541	1,47,020	1,118	11,714	27,604	2,90,010	40,167	4,67,566	41	2,161	25,05	1,12,650	1,827	3,61,603	2,113		3,041	3,21,635		
															40,13				

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

NUMBER	Railway system, vide Appendix I	XIV		XV								
		Lac		LEATHER		Total		(1) Ale and beer		(2) Wines and spirits of all kinds including country spirit		
		Quantity	Earnings	(1) Unwrought	(2) Wrought excepting boots and shoes	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	
Man head	Sub head	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	
	5' 6" gauge											
1	(a), (b) & (e)	Bengal Nagpur	10,312	85,113	1,315	8,76			145	8,770	760	3,025
2	(a), (c) to (f) & (n) & (o)	Bombay Baroda and Central India	64	628	980	14,107	910	1,315	1,038	20,612	1,109	11,061
3		Eastern Bengal State	1,107	7,42			6	50	6	60	104	4,103
4		East Indian	24,107	378,783	682	2,630	1,060	3,652	1,012	65,182	6,917	78,02
5		Great Indian Peninsula	93	9,191	90	14,380	1,301	10,00	2,200	54,75	9,518	1,37,123
6	'a) to (c)	Madras "	163	1,86	1,513	20,760	2,90	30,018	4,408	59,778	3,210	33,652
8	(a) & (b)	Nizam's Guaranteed State	21	100	1,156	16,761	11	1,60	1,223	16,400	1,70	15,02
9		North Western State	67	15,013	2,700	40,834	1,623	11,773	13,5	8,607	9,37	12,457
10		Oudh and Rohilkhand State	578	3,553	9	100	139	1,323	158	1,332	5,60	21,011
	3 3½" gauge											
11		Assam Bengal	619	6,911			4	70	1	70	101	602
12		Bengal and North Western	2,231	13,110	103	208	115	1,276	278	1,781	63	33
13		Bengal Dooars	5	92								1
14		Bhavnagar Gondal-Junagadh Forbandar	24	80	20	1,92	3	267	260	1,69	40	203
15		Burma	1,237	19,050	42	567	6	1,428	103	1,70	2,416	22,608
16		Deoghar	00	29								10
17		Dibrugarh	"							70	900	
8	(c)	Hyderabad Godavari Valley	9	118	12	123	57	750	60	912	35	131
18		Jodhpur Bikaner	357	1,993	117	1,79	111	1,553	28	2,602	71	661
6	(d) to (f)	Madras		...	3	60	3	11	6	96	1,000	3,90
19		Morvi	4	13			23	100	23	103	1	3
2	(b) & (g) to (m)	Rajputana Malwa	48	1,911	936	13,111	316	8,103	1,98	10,604	2,017	23,030
20	(a) & (l)	Rohilkund and Kumaon	107	843	5	35	70	107	30	232	1,151	6,312
21		South Indian	203	1,230	12	39	13	1,3	25	212	633	2,169
22		Southern Mahratta	62	871	99	9,003	101	1,310	1,150	10,622	1,397	11,303
23	"	Udaipur Chitor	1	0	17	97	10	70	27	172	1	21
	2 6" gauge											
24		Baraset Basirhat										5
25		Barsi Light	"	"			1	5	10	5		15
26		Bukhtarpore-Bihar Light					"					
27	"	Cutch			8	30			8	30		
30		Kalka Simla		10	6	118	21	512	27	600	1,703	10,706
1	(c)	Monrbhanj									1	
1	(d)	Parlakimedi Light									1	2
20	(c)	Powayan Light									70	51
32		Tarakeshwar Magra			1	1					33	
33		Tezpore Balipara									23	101
	2 0" gauge											
35		Darjeeling Himalayan		1	32	3	40	4	121	6	170	
36		Howrah Amra								723	6,517	107
37	...	Howrah Shealkhola										
38		Jorhat	"									
		TOTAL 1905	41,110	5,674,430	11,933	173,50	9,231	1,01,54	21,170	3,62,06	51,171	5,24,73
		TOTAL 1904	41,612	4,4,208	10,933	1,73,350	5,497	1,07,32	16,450	2,76,02	52,150	5,00,409
		INCREASE	2,598	1,07,205	053		3,737	89,813	4,600	8,083		1,521
		DECREASE				2,830					979	

DIX 17—continued.

earnings therefrom during the calendar year 1905

and is therefore not the same as the total production.]

XVI				XVII—(contd on following page)												Number			
LIQUORS				METALS												Main head			
(3) All other sorts including toddy and fermented liquor other than ale and beer		Total		(1) Brass unwrought		(2) Brass wrought		(3) Copper unwrought		(4) Copper, wrought		IRON AND STEEL				Main head			
Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	(a) Cast	(b) Unwrought	(c) Wrought					
Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs				
		4,955	14,693			1,968	21,477			330	3,310	559	7,064						
413	2,647	5,293	50,903	1,864	25,979	791	10,601	824	11,477	490	6,735	1,076	22,001	619	6,240	23,747	120,180	1	
		1,495	10,313	317	3,148	2,123	21,503	261	1,468	1,076	4,345	601	1,371	245	659	31,161	183,593	2	
850	2,493	0,810	159,718	1,200	18,783	7,671	81,468	113	2,106	822	10,35	20,861	170,314	61,753	1,12,163	57,560	5,82,751	4	
113	671	17,855	245,457	3,027	75,021	2,634	5,577	1,300	22,97	1,761	32,736	2,841	45,699	12,008	1,80,000	49,364	7,81,143	5	
9,303	11,583	12,560	92,209	663	6,211	1,611	16,637	93	1,017	290	2,296	875	3,021	1,985	17,122	29,008	1,71,322	6	
1,950	8,500	3,059	29,783	125	943	310	3,603	223	1,418	88	963	240	2,488	2,601	19,541	1,899	21,173	8	
410	5,895	15,700	29,176	900	8,937	2,181	33,218	283	3,907	1,214	18,068	1,207	18,514	1,430	11,695	4,993	7,10,781	9	
		820	57,647	239	1,214	3,613	21,807	22	191	326	2,109	1,230	6,690	0	11	13,956	73,892	10	
		307	2,693			243	2,07			7	39	81	459	17	86	2,778	21,123	11	
		295	3,061	160	1,213	1,720	18,906	5	31	136	1,775	903	5,581	407	2,109	7,655	44,723	12	
		1	8			3	12									1,003	8,220	13	
2	16	197	1,751	200	680	202	1,727	60	374	97	706	253	1,040	236	1,132	1,060	6,231	14	
"		16	3,160	34,771	63	609	217	3,182	18	226	67	1,187	305	3,079	66	401	6,458	54,702	15
		10	3	10	3	25	7					150	47	100	32	50	14	16	
		70	0.5									2,396	20,315					17	
769	4,474	667	5,112	22	160	190	2,402	1	12	18	240	79	981	761	7,327	2,703	21,048	8	
26	233	1.9	1,691	15	93	176	1,381	7	79	67	468	19	130	217	965	2,743	11,680	18	
89	427	1,397	6,039	1	2	26	125	4	20	23	124	27	213	82	167	1,436	6,698	6	
19	131	23	155	1	4	22	120			0	39	94	931				293	1,30	10
83	46	4,519	47,700	2,086	45,071	2,062	2,412	851	19,637	490	6,420	1,108	14,469	1,345	7,002	20,142	20,866	2	
		1,377	6,671	75	318	317	1,666	4	16	68	931	239	702	78	356	3,057	16,907	20	
721	8,663	1,519	31,361	1,017	7,717	97	10,210	133	1,105	108	1,812	202	4,251	2,910	12,663	9,463	75,860	21	
6,318	26,03	10,656	69,853	280	3,621	1,174	11,836	273	3,540	639	6,322	770	6,410	5,930	34,450	5,866	53,500	22	
		0	100	1	10	10	139			3	4	25	2	6	0	54	296	1,102	23
		5	15	4	9	41	193	2	5	35	96	1	3	143	334	832	1,030	24	
		1	2	1	1	3						45	130				"	25	
7	203	18.2	13,702	3	56	26	410	"	2	5	101	198	3,420	120	2,118	590	9,814	30	
4	13	4	14			3	8			5	101	6	1	2			42	1	
		71	63			6	6			1	1	8	42				93	70	23
		23	151			11	24		40	351			214	303				33	
		605	11,039			41	963			18	400	84	749				440	9,415	35
		"	"							"							"	36	
		"	"															37	
		"	"															38	
																		39	
14,661	67,201	106,013	11,79,252	13,401	2,00,794	30,608	3,42,141	4,652	70,156	8,008	1,08,544	37,433	3,40,295	9,406	1,27,350	836,660	34,03,404		
13,691	63,731	102,404	11,20,370	14,376	2,21,810	29,513	3,42,235	6,755	1,00,735	6,502	93,405	34,314	3,51,110	6,9,321	4,51,501	301,455	33,15,327		
980	4,003	4,410	49,926	"		1,295	17,010			1,146	0,049	3,004		27,0,5		38,405	1,78,077		
						975	21,560		1,703	36,570			10,615		21,202		"		

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

NUMBER		Railway system wide Appendix I	XVII						XVIII							
			METALS—concluded						Oils							
			(5) Iron and steel —concluded		(6) Others		Total		(1) Kerosine		(2) Castor		(3) Coconut			
			(a) Manufactures		Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	
Main Head	Sub head		Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	
1	(a), (b) & (e)	5' 6" gauge	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	
	Bengal Nagpur	9,593	45 787	230 027	3 11 404	271 2'4	5 17 77	27,672	2 71 311	2 00	21 473	1,880	10 041	10 041	10 041	
2	(a), (c) to (f) & (n) & (o)	Bombay Baroda and Central India.	14 "61	2 00 910	33 447	1,61 3.0	70 102	7,31,723	15 723	1 65 365	1,177	13 112	80"	10 700	300	4 007
3		Eastern Bengal State	11 217	62 587	4,762	27 0'6	5"068	2 08 669	11 349	3 12 607	69	632	1 256	9 317	5 930	20,408
4		East Indian	18 847	9 18 012	6 769	1 4"003	178 0 9	13 51 114	83 "51	7 00 653	2 020	10 72	3 0.8	16 700	6 546	73 026
5		Great Indian Peninsula	11 678	8 23,671	170 031	13 11 131	269 6 0	29 46 010	55 093	7,60 924	1 "5	18 010	2,001	11,107	51	608
6	(a) to (c)	Madras	11,763	1 10 "94	2 03,	"0 835	39 "02	3 49 71,	31 "63	2 17 80,	4 490	16,106	4 67	42 633	16	101
8	(a) & (b)	Nizam's Guaranteed State	911	11 50	750	8,609	7 399	"0 560	1 6.6	3,," 0	103	1 0"0	238	2 000	5	92
9		North Western State	16,219	3 31 171	5 701	63,152	71,060	12 7 816	10 316	3 8,9310	621	5,091	1 060	16,500	3 07	20 616
10		Oudh and Pohlkhand State	3 "60	2" 211	817	1 677	23 001	1,35 831	16 8"0	63,57	2"3	1 013	18,	950	1 479	12 753
		3' 3½" gauge														
11		A sam Bengal	1,690	17 660	1 3.6	13,157	€ 18,	57 469	15 "01	49 330	40	327	91	703	1 038	9 5.4
12		Bengal and North Western	5 3.8	35 815	2 761	21 730	10 333	1 26 020	21 869	1 00 195	302	2 231	202	1 866	663	4 011
13		Bengal Dooars	151	1,106	160	3 757	1 410	13 0"5	2 018	8 250	0	5	2	8	267	1 00
14		Bhavnagar Gondal Junagad Por nadar	663	4 033	210	1,234	3,10	17 2"3	3,003	11 706	132	0"5	101	521	115	234
15		Burma	8 233	90 8"0	231	2 2.6	15 713	1 57 03	8 802	70,224	80	1 551	899	9 803	18	223
16		Deoghar			-	33,	103	12,	80	12	3	5	2	8	3	
17		Dibrus Sadya			89	7,111	3 "23	27 426	7,"13	18 20						
8	(e)	Hyderabad Godavari Valley	368	4 167	163	2 814	3,535	42 170	1 3"8	11 70	80	695	138	1 4.8	2	4
18		Jodhpur Bikaner	500	4 673	371	2 803	4 160	20 "91	810	4 022	218	1 820	40	204	161	749
6	(d) to (f)	Madras	36"	2 34	67	6,7	2 0"2	10 700	1 "6"	4 321	24	62	709	2 510		
19		Morvi	128	502	39	100	656	2 031	181	401	10	22	12	46	18	72
2	(b) & (g) to (m)	Rajputana Malwa	4,796	71,110	34,081	6,370	60 003	4 75 157	0,212	77 33,	1,109	7 333	401	8 511	560	3 358
20	(a) & (b)	Bohilkund and Kumaon	101	1 3"5	240	1 166	1 2"6	2,130	2 130	6,615	50	1"3	6	28	142	818
21		South Indian	6 800	75 657	1 471	13 917	22 564	2 02,030	2,056	1 42 517	3 30	22 908	1 31	5 579	411	1 611
22		Southern Mahratta	4 317	49 147	5 475	37 130	21 723	2 04,0"6	7 003	1 70 570	668	6 590	1 623	10 003		
23		Udaipur Chitor	26	173	44	234	311	1 600	150	1 023	6	22	5	24	1	
		2' 6" gauge														
24	-	Baraset Basurhat														
25		Barsi Light	117	343	10	56	1,107	2,008	4 0	9,0	3	11	92	231	-	
26		Bukharpore-Bihar Light														
27		Catch					47	180	5	15			5	14		
30		Kalka Simla	102	3 013	78	2,107	1 221	21,911	430	6,233	3	43	1	31	3	48
1	(c)	Monrbhanj	5	22	3	6	28	86	14	46						
1	(d)	Parlakimedi Light	1	2	11	14	110	130	200	110	1	1	3	3		
20	(c)	Powayan Light					214	302	"	"						
32		Tarakeshwar Magra	0	15			20	30	33	52					161	211
33		Terpori Balipara					40	304	"	"						
		2' 0" gauge														
35		Darjeeling Himalayan	5"3	10 363	160	3 783	1,225	20 091	612	12 975	5	71	1	62	413	6 354
36		Howrah Amra								"			"			
37		Howrah Shrikakhalia											"			
38		Jorhat											"			
		TOTAL 1903	179,209	17,07,380	513 031	22,75 0"9	1 169 772	80 6,505	537 826	37 53 1"0	19 703	1,41 0.0	20 0 0	104 460	21 641	1 87 769
		TOTAL 1904	112 312	14 10 766	285 613	11 37 778	869 791	77 18 810	506 663	3,42 021	70 603	1 34 143	16 426	1 60 "0	16 533	1 30 020
		INCREASE	16 066	2 03 624	210 358	8,98,151	"93 901	1" 40 650	30 663	2 11 103		6 0"4	4 003	45,213	5 100	49 10
		DECREASE											813			

DIX 17—continued

the earnings therewith during the calendar year 1905

and is therefore not the same as the total production.]

XIX—(continued on following page)

OIL SEEDS

(a) Others		Total		(1) Castor		(2) Earthnuts		(3) Linseed		(4) Poppy		(5) Rape and mustard		(6) Til or jinph		(7) Cotton seed		Number	
Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Larungs	Quantity	Earnings	Quantity	Farmings	Quantity	Earnings	Quantity	Earnings		
Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	1	
2,036	19,851	34,102	3,74,032	21,762	2,08,201	1,940	15,446	8,146	81,278	8,241	57,332	20,010	1,61,103	27,514	2,13,105	"	"	2	
4,641	49,634	22,911	3,40,067	21,762	2,08,201	1,940	15,446	8,146	81,278	8,241	57,332	20,010	1,61,103	27,514	2,13,105	"	"	3	
1,126	2,710	163,741	3,05,090	303	603	175	1,03	101,170	75,112	88,231	2,76,605	130,203	10,60,810	15,213	1,10,620	41,001	2,13,035	4	
3,339	13,097	16,207	9,69,650	30,332	2,01,633	11,907	1,03	1,31,281	151,763	17,73,016	11,143	1,62,362	16,187	1,89,156	60,003	9,18,593	180,36	10,85,503	5
29,33	2,2839	81,030	10,67,515	11,010	93,703	31,192	13,037	418	1,670	51	412	604	4,683	25,926	1,12,133	"	"	6	
10,676	61,016	51,021	3,40,811	37,670	1,04,016	3,192	13,037	418	1,670	51	412	604	4,683	25,926	1,12,133	"	"	7	
533	1,031	5,635	11,037	15,60	2,12,201	53	373	9,020	21,431	123	666	156	710	18,583	1,10,605	5,622	2,3,264	8	
6,133	49,981	29,171	1,83,701	903	5,010	320	4,070	2,163	19,684	534	3,02	60,117	3,93,703	18,930	1,49,573	69,000	4,31,310	9	
6	1,523	10,462	1,02,706	1,273	18,162	69	447	5,601	21,607	14,012	63,677	9,223	30,733	4,191	17,666	"	"	10	
181	1,439	16,57	61,403	11	25	4	16	63	191	5	14	2,774	10,00	1,363	3,881	"	76	11	
304	2,330	26,30	1,11,25	4,780	14,392	50	186	36,013	1,61,717	7,097	37,167	39,180	2,02,618	303	1,342	"	"	12	
6	2	2,310	0,03	"	"	"	"	"	"	"	"	1,733	5,191	"	"	"	"	13	
711	3,223	1,65	16,110	2,756	0,66	201	1,373	1	10	280	739	671	4,655	4,614	11,782	"	"	14	
9,416	61,701	10,418	1,75,683	15	102	1,500	10,416	6	33	2	36	8	77	6,203	3,819	"	"	15	
80	74	230	71	30	10	"	"	10	3	8	3	20	10	4	2	"	"	16	
"	7,213	18,270	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	17	
2,304	24,727	3,632	3,0,088	34	1,010	101	768	93,060	2,28,703	49	203	200	1,610	2,887	31,062	23,113	1,49,098	8	
770	4,686	2,008	12,272	"	1	31	108	"	7	3	12	2,689	12,100	6,372	34,420	"	"	18	
692	2,979	2,053	8,045	4	23	56	103	"	"	"	"	2	5	490	813	"	"	6	
131	541	3,32	1,182	"	"	8	30	"	"	1	1	"	"	1,433	2,898	1,212	2,200	10	
2,003	21,646	13,435	1,18,218	10,640	43,895	1,173	14,040	7,040	13,307	10,379	61,371	31,603	1,78,531	23,040	1,60,910	"	"	2	
53	541	2,301	6,70	2,539	6,450	18	101	1,200	2,362	1,703	2,409	4,765	10,047	711	1,60	"	"	20	
11,603	40,601	11,60	10,210	4,430	2,312	63,401	1,19,602	2	24	21	142	1,018	5,730	25,953	1,51,000	"	"	21	
7,484	55,774	37,178	1,43,32	6,227	33,372	3,97	10,203	8,403	67,740	40	3,570	683	3,970	15,063	97,161	20,771	1,32,766	22	
12	5	212	112	"	"	9	67	22	67	462	897	"	"	200	667	"	"	23	
"	620	2,180	1,333	3,430	300	691	2,292	5,067	11,501	31,304	14	34	304	803	970	2,100	2,413	5,163	24
"	"	10	29	45	11	"	"	"	"	"	"	"	"	11	39	"	"	25	
20	633	474	6,08	"	1	"	"	"	1	17	"	"	"	4	"	5	9	107	30
1	4	15	50	"	"	"	"	"	3	8	"	"	9	43	"	2	"	1	1
9	7	221	127	3	3	"	"	"	3	2	"	"	26	160	102	"	"	20	
"	"	211	203	"	"	"	"	"	"	"	"	231	367	"	"	103	256	32	
30	254	29	254	"	"	"	"	"	1	20	"	"	3	49	"	"	"	33	
81	1,434	1,918	20,316	"	"	"	"	"	"	"	"	3	"	"	"	"	"	35	
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	36	
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	37	
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	38	
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	39	
80,381	1,19,415	6,557,2	0,0,762	100,416	10,19,00	121,905	3,70,010	4,70,707	34,68,470	96,698	7,12,181	3,57,120	1,93,237	303,830	23,61,009	9,0,07	9,41,004		
76,058	5,36,741	63,31,	4,10,63	265,370	14,20,003	153,468	3,64,906	870,623	66,41,270	137,002	10,66,007	5,6,610	14,40,621	400,981	31,97,489	209,561	20,60,310		
11,200	1,62,690	50,453	1,01,070	"	"	10,013	"	447,726	31,85,800	40,301	3,73,320	100,403	19,47,384	97,415	8,70,481	110,403	8,81,604		

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

Number		Railway systemvide Appendix I	XIX.				XX		XXI		XXII				
			OIL SEEDS—concluded				Opium		Paper and paste board		PROVI				
			(8) Others		Total						(1) Dried fruits and nuts	(2) Ghee			
Main head	Sub head		Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	
		5' 6" gauge	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	
1	(a) & (b)	Bengal Nagpur	10,14*	73,46	69,367	5,62,108	72	2,118	1,217	19,542	10,913	78,3*1	3,854	47,861	
2	(a) & (c)	Bombay Baroda and Central India	7,304	62,76*	98,030	7,00,370	1,423	50,546	2,298	35,146	20,256	2,22,243	5,771	71,805	
3		Eastern Bengal State	653	2,608	55,64*	1,61,970	0	62	7,600	9,268	42*	1,023	660	5,040	
4		Fast Indian	9,407	63,613	372,430	26,67,697	8,697	2,07,591	10,270	1,76,937	6,401	80,661	18,849	3,08,719	
5		Great Indian Peninsula	28,252	2,56,271	503,467	55,33,030	503	21,404	3,110	50,704	39,675	6,70,881	11,115	1,84,975	
6	(a) to (c)	Madras	60,681	3,42,758	128,862	5,78,863	109	1,908	1,286	17,197	12,377	4,764	5,304	50,150	
8	(a) & (b)	Nizam's Guaranteed State	4,360	13,007	63,495	4,12,340	40	1,589	674	7,935	10,977	57,99	671	7,095	
9		North Western State	69,122	8,49,299	231,400	18,61,761	71	9,07	3,430	57,128	23,810	4,16,018	11,303	1,29,672	
10	*	Oudh and Rohilkhand State	18,163	76,318	56,65*	2,97,452	1,477	33,493	2,410	14,470	1,064	16,843	3,249	18,031	
		3' 3½" gauge													
11		Assam Bengal	22	160	4,638	14,971	1	18	114	5*5	860	5,808	223	1,007	
12	*	Bengal and North Western	7,861	35,726	9,177	4,43,109	7,631	1,02,405	3,230	8,140	1,262	15,654	3,691	3,056	
13		Bengal Dooars			1,733	5,191									
14		Bhavnagar Gondal Junagadh Porbandar	15,63*	49,405	21,375	77,248	11	168	198	1,167	2,450	10,582	1,682	11,434	
15		Burma	1	67	7,691	43,664	23	441	576	8,104	902	7,765	1,034	14,763	
16		Deoghar	40	12	122	40						..	40	12	
17		Dibrugarh	"									66*	5,052	...	
6	(c)	Hyderabad Godavari Valley	5,153	3*,590	66,13*	4,36,053	18	708	216	2,767	1,952	21,215	500	7,143	
18		Jodhpur Bikaner	12,010	47,216	21,014	93,003	68	472	83	734	2,089	12,493	6,113	51,93*	
6	(d) to (f)	Madras	1,783	3,506	2,341	4,570	36	56	48	278	6*	228	205	841	
19		Morvi	127	265	2,783	6,392	0	71	59	310	105	368	63	244	
2	(b) & (g) to (m)	Rajputana Malwa	7,897	1,001	103,041	5,72,071	2,477	4*,490	1,815	30,560	13,01	1,72,64	9,520	1,02,402	
20	(a) & (b)	Pohlkund and Kumaon	57	172	11,031	29,425	18*	1,644	115	455	168	1,288	219	1,125	
21		South Indian	3,519	12,630	133,430	3,47,470			2,117	30,108	478	3,360	1,215	9,83*	
22		Southern Mahratta	8,167	33,710	60,168	8,81,973			15	707	0,001	29,615	2,12,327	5,168	39,233
23		Udaipur Chitor	211	933	933	2,711	120	767	38	254	456	2,365	146	771	
		2' 6" gauge													
24		Barasat Basirhat											..		
25		Bara Light	1,620	3,903	2*,681	40,110			40	110	500	1,450	50	184	
26		Bukharpore Behar Light											..		
27		Cutch			56	56			4	12	321	1,132	5	14	
30		Kallia Simla	15	263	2*	402	7	163	269	7,775	46	84	50	785	
1	(c)	Mourbanji	293	919	300	1,004			12	61	1	5	6	15	
1	(d)	Parlakimedi Light	03	82	290	211			1	4	8	6			
20	(e)	Lewayan Light			231	367			8	8			20	3*	
32		Taraknath Varanasi			19*	26							23	149	
33		Terapore-Balipara	7	51	7	54									
		2' 0" gauge													
30		Darjeeling Himalayan			3	71			8	100	2,780	31	663	30	354
36		Hovrah Amritsar													
37	*	Hovrah Sheekhala			..	..							
33	*	Jo hat			..	..							
		Total 1903	2,0018	0,05,023	2,163,716	1,53,50,554	22,681	4,72,179	42,074	5,00,699	182,666	20,57,516	93,904	11,01,2,1	
		Total 1904	266,675	20,80,3-0	2,025,732	2,12,74,543	24,103	5,21,333	41,101	5,17,180	103,561	21,05,577	99,637	12,23,029	
		INCREASE	13,003	..										..
		DECREASE	..	73,457	750,016	60,17,059	1,809	49,174	2,100	10,402	10,68,	3,03,011	4,033	32,078	

DIX 17—continued.

the earnings therefrom during the calendar year 1905

and is therefore not the same as the total production.]

				XXIII												XXIV		Number	
				RAILWAY PLANT AND ROLLING-STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS														Number	
(3) Others		Total		(1) Locomotive engines and tenders and parts thereof		(2) Carriages and trucks and parts thereof		(3) Materials				Total		Salt.				Number	
Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	(a) Steel rails and fish plates	(b) Sleepers and Keys of steel and cast-iron	(c) Others	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings			
Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Tons	Rs	Tons	Rs	Tons	Rs			
4 397	60,136	18,654	1,86,321	140	1,226	29	599	830	3,716	23	563	86,018	4,63,809	87,030	4,59,903	115,179	60,04,49	1	
20,305	149,859	46,322	4,34,907	577	1,291	683	4,227	27,659	1,54,031	2,311	11,397	34,227	1,59,614	6,5,636	3,31,200	172,055	531,245	2	
10,656	68,477	11,750	73,430	109	129	338	396	529	485	105	136	10,684	28,182	18,115	29,878	69,336	4,17,001	3	
79,155	8,67,524	104,408	18,56,107	1,630	15,830	198	1,063	25,520	1,90,838	6,651	49,585	101,245	3,60,718	27,5,589	9,4,030	239,701	11,47,088	4	
45,363	4,49,976	99,153	12,54,132	341	3,010	262	3,418	11,984	60,123	6,921	48,368	8,114	58,5,0	27,675	1,89,503	204,055	10,76,296	5	
89,416	6,9,172	107,127	7,25,078	305	1,165	2	4	1,493	8,757	332	1,011	826	3,411	3,013	14,348	105,640	4,88,319	6	
3,203	22,529	14,643	1,18,608	1	4			136	1,036						137	1,640	35,370	1,78,088	8
10,560	1,93,541	45,023	7,30,181	10	21			1,020	15,151	6,493	37,930	92,713	5,70,232	100,235	6,23,307	105,050	6,78,090	9	
1,150	10,735	6,363	4,5,617					412	1,403			14,905	34,631	15,317	36,034	62,040	3,25,511	10	
5,578	45,033	6,661	5,7,749					95	1,406			509	1,013	604	2,410	18,204	70,004	11	
25,548	91,418	30,501	130,059					683	16	18	2	766	763	774	1,658	111,901	4,44,379	12	
813	4,0,7	812	4,0,7	...				..	26	43		1,061	727	1,087	770	4,321	12,009	13
4,733	23,003	8,895	46,224	27	232	64	277				4,122	6,431	4,213	6,940	5,709	9,050	14		
44,696	4,21,149	43,032	4,46,697					202	502					202	563	20,60	3,12,426	15	
"	40	12						"								2,410	398	16	
	665	5,053													"	77	2,901	17	
5,230	24,209	7,781	5,7,657													10,707	9,228	8	
1,618	8,606	10,470	73,274	408	1,355	125	916	1,263	1,605	147	300	4,176	14,018	6,179	18,490	19,274	91,908	18	
5,014	21,617	5,314	2,7,696	126	677			1,200	6,336	1,419	6,457	32	139	2,777	13,639	3,211	5,398	6	
451	1,2,0	624	1,632					729	1,241			8	14	737	1,255	416	648	10	
10,773	76,491	33,650	8,50,610	258	401	322	2,204	21,764	6,213	2,343	5,208	110,882	1,43,660	144,059	2,70,674	25,7,810	25,54,125	2	
412	4,223	769	6,639	6	32					956	2,044	957	1,707	1,919	3,783	14,518	42,0,5	20	
28,975	1,81,677	80,618	1,04,372	330	916	367	744	251	1,011	73	99	223	880	1,244	3,656	78,446	2,97,345	21	
20,244	1,33,050	55,017	3,64,610	201	123	1,109	2,347	2,763	11,833	1,170	2,816	14,053	50,727	19,301	69,151	52,301	4,16,306	23	
308	1,285	893	4,431					0	21			3	5	9	26	921	3,910	23	
"	231	600	1,600					"							"	4,400	9,088	23	
	"	876	1,146					"									27		
4,011	35,791	6,007	37,421													787	8,053	30	
30	80	37	100													517	1,092	1	
20	18	28	24													893	185	1	
"		20	35													216	353	20	
		23	149													122	155	32	
1,920	29,382	190	30,379													1,097	16,814	35	
		"															36	87	
																	38	38	
4,701	111	3,4,069	701,691	67,91,438	4,9,7	76,85	3,638	17,069	97,458	5,45,374	20,251	1,66,238	500,723	21,69,215	725,910	20,44,720	1,739,049	1,07,23,782	
413,792	34,30,375	705,600	69,19,831	3,794	14,055	19,900	4,0,932	91,918	6,64,009	21,193	78,265	530,251	22,80,693	609,556	30,60,630	1,617,209	1,02,32,706		
11,919	1,12,294			1,593	12,140			2,510	-	8,0,8	67,0,3	60,471		55,390		90,637	4,91,078		
"	4,200	29,390				16,26°	25,014		118,835	...			91,030		1,38,116	"	"		

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

DIX 17—continued

the earnings therefrom during the calendar year 1905

and is therefore not the same as the total production T .

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

Commodity	Railway System, vide Appendix I	XXIV								XXX						
		SUGAR								Tea						
		(1) Refined or crystallized including sugarcandy		(2) Unrefined		Total		(1) Foreign		(2) Indian		Total				
Main Head	Sub-Head	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	
		Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	
1	(a) (e) & (e)	5' 6" gauge														
1	(a) (e) & (e)	Bengal Nagpur	11,621	80,811	"	14,428	1,21,551	26,249	2,05,365	"	312	4,400	312	4,400		
2	(a) (e) to (f) & (n) & (o)	Bombay Baroda and Central India	37,252	4,35,043	94	664	27,604	2,10,309	64,930	6,55,101	368	5,187	261	5,227	647	10,314
3		Eastern Bengal State	10,616	76,031	16,608	69,691	28,052	1,79,010	56,204	2,75,632	26,710	5,28,012	26,710	5,28,012		
4		East Indian	23,45	2,33,770	64,075	37,1786	130,704	5,81,380	217,814	11,76,672	1,507	30,699	1,507	30,699		
5		Great Indian Peninsula	70,707	10,40,912	9,171	72,452	85,556	8,18,652	105,434	10,31,916	140	2,395	970	22,058	1,110	25,353
6	(a) to (c)	Madras	6,920	49,740	6,472	34,071	51,936	2,16,755	65,249	2,01,566	9	256	600	12,456	603	12,712
8	(a) & (b)	Nizam's Guaranteed State	2,939	23,154	701	5,093	4,084	29,003	7,774	58,239	23	302	69	1,317	91	1,510
9		North Western State	80,478	14,00,200	20,810	1,67,151	144,769	10,54,507	240,000	20,30,658	871	18,295	2,154	31,616	8,025	49,911
10		Oudh and Rohilkhand State	10,703	49,432	82,400	3,05,170	98,510	3,70,207	191,823	7,81,678	2,24	19,167	2,24	19,167		
		3' 3½" gauge														
11		Assam Bengal	5.7	2,776	1,386	6,858	2,274	10,030	4,317	19,681	29,310	3,70,603	28,310	3,29,80		
12	"	Pengal and North Western	3,781	22,181	26,143	1,61,204	60,630	2,61,648	90,56	4,67,933	"	61	891	61	891	
13		Bengal Dooars	491	1,850	171	747	807	4,12	1,472	0,769	13,462	2,69,207	13,452	2,69,207		
14		Bhavnagar-Gondal-Junagad Por bandar	7,237	33,178			3,079	13,513	10,916	46,691	2	14	71	624	73	538
15		Burma	140	1,52	4,801	63,937	13,331	1,19,63	18,272	1,68,104	1,255	23,046	65	1,297	1,320	23,273
16		Deoghar			250	77	500	141	760	218	"	"	8,637	75,401	0,637	75,401
17		Dibrus Sadiya	483	3,313					483	3,313						
8	(c)	Hyderabad-Godavari Valley	2,534	22,383	38	3,7	913	8,110	3,515	30,681	5	68	2	19	7	11
18	"	Jodhpur Bikaner	3,091	20,71	5,376	20,103	9,093	6,75,3	18,150	1,03,467	3	49	2	32	6	72
6	(d) to (f)	Madras	1,131	4,245	118	731	1,403	3,206	2,657	8,77	1	2	2,22	1,110	223	1,112
19		Morvi	15	492	67	170	1,270	3,001	1,402	3,763					18	4
2	(b) & (g) to (m)	Rajputana Malwa	21,735	24,70,000	45,401	3,70,93	87,28	10,71,213	1,8,501	16,99,102	367	9,66	148	2,215	610	11,680
20	(b) & (l)	1 Chiklund and Kumson	917	3,378	7,071	18,058	23,063	67,01	31,974	1,03,537			165	1,134	1,05	1,134
21	"	South Indian	17,49	68,935	4,69	2,731	37,636	2,27,955	59,193	3,70,074	22	4,8	50	1,003	81	1,501
22	"	Southern Mahratta	9,62	63,743	5,702	41,930	56,856	3,39,771	72,500	4,43,914			2	5		7
23	"	Udaipur Chitor	317	1,903	600	3,718	731	3,110	1,849	8,681						
		2' 6" gauge														
24	"	Baraot Basirhat			**						1	3			1	3
25	"	Barel Light	501	1,346	8	22	400	658	951	2,206						
26	"	Lakhtarpore-Behar Light			20	66	276		204	575	1	3			1	3
27	"	Cutch	103	2,0					204	575						
28	"	Kalka Simla	212	3,781	219	3,070	502	7,635	1,053	14,191	5	90	43	E50	48	940
1	(c)	Mourbanj	11	31	"		3	0	14	40						
1	(d)	Parakinedi Light	83	51			6	1	94	65						
23	(e)	Pawayan Light			1,102	1,307	"		1,102	1,307						
32	"	Tarkeshwar Magra			63	106	142	160	220	240						
33	"	Tespa e-Balpara	2	10			"		2	10						
		2' 0 gauge														
35	"	Darjeeling Himalayan	61	1,230	603	12,027	218	3,070	972	10,783			4,060	56,804	4,060	56,804
36	"	Howrah Amrit	"	"	"	"	"	"	"	"					"	"
37	"	Howrah Shabakal.	"	"	"	"	"	"	"	"					"	"
38	"	Jorha*	"	"	"	"	"	"	"	"						
39	"	Total 10'5	37,641	33,67,023	33,755	18,23,707	6,90,011	57,55,413	1,62,307	1,14,01,023	3,070	59,770	60,328	14,43,603	10,407	15,02,647
		Total 10'4	323,591	41,20,062	272,033	17,25,720	845,046	56,69,403	1,446,590	1,15,14,7	3,40	66,058	119,650	15,07,124	12,100	15,73,163
		INCREASE	"	"	33,722	95,81"	43,045	1,10,010	75,727	"	"	"	"			
		DECREASE	1,00	2,33,039	**	**			**	23,183	171	7,279	19,522	63,256	19,003	70,635

DIX 17—continued

the earnings therefrom during the calendar year 1905

and is therefore not the same as the total production.]

XXXI								XXXII								XXXIII—(continued on following page)								Number	
TOBACCO								WOOD								WOOL								Number	
(1) Manufactured	(2) Manufactured				Total	(1) Timber unwrought	(2) Manufactured	Total	(1) Raw	(2) Manufactured				(a) Carpets and rugs	(b) Piece-goods European	(c) Piece goods Indian	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Main head		
	(a) Cigars	(a)																							
Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs		
0.302	63 255					757	10 378	10 110	96 003	56 197	2 31623	2 157	18 393	59 694	3 59 620										1
140 3	1 15 355	100	5 151	663	6,010	15 011	1 23 551	37 215	2 14 763	1 429	1 8 363	4 314	18 632	4 3 3 6	1 01 500	1 423	2 0 700								2
34 450	3 78 63					702	11 360	3 0 138	3 40 070	38 002	8 074	3 414	18 632	4 3 3 6	1 01 500	1 423	2 0 700								3
92,009	3 51 000	55	1 221	2 010	76 310	3 0 033	4,0 0 06	01 310	2 4 70	7 048	69 10	60 283	3 3 3 000	1 584	20 001	607	17,416	820	14 004	340	9 638		4		
10 110	1, 36,60	1 001	31 248	109	8 001	11,510	1,0 6 845	16,701	6 84 203	9 1 1	1 50 303	171 673	7 10 670	703	13 515	63	3 189	263	11,862	167	4 607		5		
22 0,2	1 36 330	701	12 711	1 4 1	10 7,0	21 21	1 63 8,0	2 0 001	0,40 050	4 0 5	12 307	213 029	6 63,050	2 0 68	20 078	617	5 703	147	5 304	741	8,633		6		
1 42	10 001	116	1 0 4	16	21	1 51	2 0 072	20 910	75 003	607	7,312	1,1 703	82,875	301	2 005	66	1,180	70	3 01	261	3 163		8		
16 001	1 70 0,03	93	2 2 3	2,007	53 513	19 0,6	2 0 0 870	72 003	2 70,104	10 131	1 03 717	83 004	3 73 011	18 876	4,00 807	276	4 426	1000	1 300	1103	23 684		9		
8 3,3	45 0,1	62	6,0	2 0	2,072	5 003	19 702	103,700	1 03 1,07	6 0 9	33 415	115 029	2 0 6 5,2	333	2,650	19	118	10	1 100	321	3 528		10		
1 032	11 0,0	15	267	111	1 787	2 059	1,0 023	707	3,2	1 651	13 8,7	2 3,8	17 000	2	13	230	1	2	38	11					
3,003	93 10	5	730	2 73	2 110	2 0 17	2 06 650	31 403	93 0,8	1 1 1	3 0 032	35 581	1 70 660	100	1,617	61	608	84	0 03	332	3 144		12		
2 67	6 1 1					33	30	2 600	0 16	2 3 9	11 122	2	295	2 413	11 417									13	
1,008	5 023	1	63	201	2 016	1,313	8 002	11 027	51,349	601	1 606	11 718	56 015	718	5,412									14	
4 7,5	30 103	160	2 169	707	7 057	0 130	18,093	131,760	360 203	2 07	18 407	134 11	6 78 700	31	522	90	2 125	8	191		1	15			
203	03	59	14	-	-	0	77	, 30	10			30	10										16		
"	"	"	"							3 3 0	10 2,1	3 3 0	10 2,1										17		
0 43	6 012	3	60	26	474	412	7 140	7 09	36 706	1 111	10 711	9 112	47 417	7	1 0	38	768	2	0	0	1 160		8		
1 330	0 207	21	2 04	170	603	1,4 0	10 420	1,50	8 7 0	1 5	2 00	2 051	11,710	4 700	44 423	7	110	4	61	25	2 0		18		
1,671	0 203	21	270	14	121	1 603	6 006	7 8,1	35 218	1 102	1 502	21 063	30 760	2	31	1	21	2	12	11	60		6		
4 8	1 130	1	11	20	134	511	1 0 92	1 031	3 314	60	200	1,144	3 583	2 0	1 023	4	2	6	30	11	106		10		
1' 011	1 6 211	103	1,23	703	6 070	13,570	1 57 10	17,508	69 3,2	3 121	20 057	20 0 02	0 430	10 081	1 52 780	162	5 000	411	14,161	713	16 009		2		
1,70	8 603	16	170	212	1 000	2 0 01	10 632	21 017	73 331	1,140	5 071	2 0 100	70 302	237	1 207	5	38	6	80	11	106		20		
0,510	31 7,1	1 610	18 007	1,738	0 397	9 7,8	0 153	11 8	1 77 0,	0 183	11 92	118 012	2,2,701	293	2,153	121	1 730	4	27	161	3,167		21		
17,"	71 213	2,6	5 82	160	2 708	12 700	8 503	41 303	1 90 700	5 700	31 010	50 167	2 30 725	600	8 517	6	1	37	41	600	21		22		
371	1,710	1	2	12	60	397	1 837	23	107	1	0	40	294	73	514	2								23	
"	"	1	13	10	15	60	184	147	301	170	160	326	761	1	2								24		
10	30					10	30	10	130			40	40	10	17	40								25	
C6	1 001	22	600	31	723	121	2 610	0 0	8 018	343	5 502	903	13 010	1	21	30	517	20	515	65	1,508		30		
5	13			1	3	6	16	81	261	9	23	90	287										1		
10	9			2	3	18	12	21	12	16	30	40	61										20		
53	77					53	77	3	43	1	2	36	45	1	3								33		
1	2					1	2																33		
33	700	161	4 601	70	14 0	276	6,711	532	4,020	107	3,203	729	8,163	13	2,6	5	130	6	101	12	8,7		35		
																							36		
																							37		
																							38		
222 317	70 33 20,	5 000	0 724	11 0,0	2 0 0,07	2,1 731	23 5,689	1 080 400	33 03 697	78 407	7 27 621	1 161 670	16 21,211	40 010	9,10 763	2 403	47,895	3 426	78 70	4 982	92 681				
225 705	18 81 716	5 039	05 000	16 8,01	2,10 003	247 8,8	21 08,83	1 138 8,0	35 81 8,0	72 590	5,04 0,02	1,211 354	44 40 774	49 701	9 06 576	2,102	41 452	2,469	66 312	4 010	1 01 770				
0 510	1 61 480					7 602	3 023	1,57 105		12 965	5 678	1,02 072	1,71 937				211	3 343	950	11 956	33	12 105			

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

NUMBER Main head	Sub-head	Railway system, vide Appendix I	XXXIII		XXXIV		GRAND TOTAL			
			Wool—concluded		All other articles of merchandise					
			(c) Manufactured—concluded		TOTAL					
			(d) Other sorts of manufac- tures							
			Quantity	Earnings	Quantity	Earnings	Quantity	Earnings		
			Tons	Rs	Tons	Rs	Tons	Rs		
		5' 6' gauge								
1	(a) (b) & (c)	Bengal Nagpur								
2	(a) (c) to (f) + (n & o)	Bombay, Baroda and Central India	63	1,316	8,909	1,50,001	322,516	13,24,400		
3		Eastern Bengal State	2	7	1,522	26,611	161,070	6,00,636		
4		East Indian	961	23,294	4,321	81,420	533,819	34,43,000		
5		Great Indian Peninsula	1,179	23,895	2,496	50,089	261,000	20,10,716		
6	(a) to (c)	Madras	179	2,190	3,92	4,88	112,931	9,90,539		
8	(a) & (b)	Nizam's Guaranteed State			1	671	7,590	1,35,084		
9		North Western State	1,203	22,006	2,498	5,41,503	357,170	82,63,131		
10		Oudh and Rohilkhand State					232,20	8,66,139		
		3 3½" gauge								
11		Assam Bengal	18	117	33	393	15,403	1,00,572		
12		Bengal and North Western	3	12	592	6,394	78,413	2,77,338		
13		Bengal Dooars					6,009	63,378		
14		Bhavnagar Gondal Junagadh Porbandar	2	13	761	5,506	9,70	5,740		
15		Burma					108,260	260,618		
16	"	Deoghar					7,15,918	1,493,071		
17		Dibrugarh					6,454	2,039		
18	(c)	Hyderabad Godavari Valley			142	2,052	31,386	63,032		
19		Jodhpur Bilawal	311	2,653	4,616	47,701	21,682	33,629		
20	(d) to (f)	Madras	1	8	20	140	1,321	418,761		
21		Morvi	5	36	263	1,660	6,236	22,110		
22	(b) & (g) to (m) (a) & (b)	Rajputana Malwa	112	2,330	11,670	1,02,947	273,312	14,78,061		
23		Pohlkund and Kumaon	115	633	373	2,014	69,630	1,60,407		
24		South Indian	61	692	573	7,773	113,966	6,03,780		
25		Southern Mahratta	780	6,180	1,432	17,600	100,000	3,54,632		
26		Udaipur Chitor	1	4	74	57	931	5,071		
		2 6" gauge						15,611		
27		Barnett Birsinghat					2,003	2,432		
28	"	Barsi Light	5	10	6	19	601	1,082		
29		Bukharpore-Behar Light					10,284	25,601		
30		Cutch			17	49	2,331	7,603		
31	(c)	Kalka Simla	0	105	131	2,696	3,279	45,008		
32	(d)	Mourbhaj					131	1,274		
33	(e)	Paralakhemi Light					208	210		
34	(c)	Porayan Light	---				20,34	30,113		
35	"	Tarakeshwar Magra			1	3	507	1,107		
36		Tepore-Bilipara					6,311	14,457		
		2 0" gauge						14,178		
37		Darjeeling Himalayan	3	70	39	1,009	5,680	56,673		
38	"	Howrah Amra	---				17,507	27,607		
39	"	Howrah Sheonthala	---				6,300	8,621		
40	"	Jorhat					10,158	47,445		
		Total 1905	5,673	8,780	6,443	12,17,223	3,144,057	1,61,30,405		
		Total 1904	5,014	1,13,152	65,20	13,23,293	3,110,500	1,61,81,116		
		INCREASE	--	--	221			10,46,370		
		DECREASE	501	2,335		1,08,00	5,012			

DIX 17—concluded

the earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

ANIMALS										NUMBER	REMARKS	
(1) Horses		(2) CATTLE		(3) SHEEP, ETC		(4) ELEPHANTS		TOTAL				
Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Quantity	Earnings	Main head		
Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs	Tons	Rs			
01	5761	7,111	52 421	3 832	36 076	1	113	11,011	71 301	1		
310	11 118	9,006	179 703	10 712	23 803		"	23 611	426 677	2		
63	1 659	235	2,154	300	2 039			601	5 001	3		
1 793	75 431	2 036	78 612	4 733	104 212	"	30	9,029	278 374	4		
1 293	91,503	10 825	69 058	11,237	163 689		"	23,35	365 110	5		
	"	"	"							6		
2,0	739	55	891	25	307	2	61	33	8 714	8		
3 931	99,909	3,702	41,830	522	14 039			7 635	1,55 030	9		
1,129	48 660	502	6,703	31	1 426			1 001	50,370	10		
										11		
5	237	42	403	93	971			14	1 001	11		
82	5 801	513	3 250	135	2 878	"		700	11 471	12		
										13		
10	104	70	1,115	11	113			100	1 392	14		
696	29 146	4 005	1,42 431	1 003	43 658	5	2 607	7,400	217 042	15		
				"	"					16		
		13	6,9					13	670	17		
"										18		
47	1,950	12	518	12	108			71	2 000	8		
61	1 54	72	950	1	22			157	2 01	19		
"	"	"	"	"	"					20		
8	115	12	16	1	10	"		21	200	10		
383	11,261	2,553	41,315	4 503	63,502			7,631	1,19 403	2		
10	17	11	307			"		21	34	20		
11	2,9	1 117	7 618	3 856	33 123		"	5 014	41 030	21		
181	5 971	163	4 449	610	5,000	21	410	1 010	15 021	22		
10	93	4	41	"	"		"	14	110	23		
"	"	"	"	"	"					24		
"	"	"	"	"	"					25		
										26		
1	68	10	50	"	"		"	11	569	27		
										28		
"	"	"	"	"	"					29		
"	"	"	"	"	"					30		
										31		
										32		
"	"	"	"	"	"					33		
										34		
										35		
										36		
										37		
										38		
10,041	3 60,407	41,103	6,39 571	41 603	7,49 323	32	3,430	98 777	17 50 ,31			
9 580	3 85 831	31,698	6 73 930	10 240	6,02 731	3	434	81 735	17 50 639			
105	10,573	9,005		4 703	55 592	20	2,036	14 042	33 703			
				35,369								

Analysis of working of each railway

NOTE.—Railways not shown

Serial number	PARTICULARS	GAUGE Number Calen- dar year 1905	5' 6"												
			Bengal Central	Bengal Nagpur	Bom- bay, Baroda and Central India	Eastern Bengal	East Indian	Great Indian Peninsula		Madras	Nizam's Guanan- ted State	North West ern	Oudh and Rohil- khand		
			G I P	I M											
DESCRIPTION OF RAILWAY WORKED															
1	Gauge of railway		5' 6"	5' 6"	5' 6'	5' 6"	5' 6"	5' 6"	5' 6"	5' 6'	5' 6	5' 6'	5' 6'	3' 3"	
2	Mileage worked	Miles	111 57	1,693 57	632 67	370 42	2,270 23	106 0	1,170 13	1,408 12	354 70	3,868 0	1,193 28	749 38	
3	Number of stations	No		28	233	132	129	378	260	148	301	45	578	182	106
4	Total length of the following gradients—	Miles						5' 00	19' 31	{ 6' 75					
	(a) $\frac{1}{10}$ and less												71 12	0 10	10 10
	(b) $\frac{1}{10}$ to $\frac{1}{5}$	"		0 15	1 32			16' 78	2' 62	{ 22' 81			84 97	9' 30	33 03
	(c) $\frac{1}{5}$ to $\frac{1}{2}$	"		103 90	0 50			40' 27	61' 90	11' 23	52' 80	70' 10	123 13	6 41	25 70
	(d) $\frac{1}{2}$ to $\frac{1}{60}$	"		570 81	168 75			150 25	549 90	362 91	289 69	110 99	99 83	10 15	69 99
	(e) $\frac{1}{60}$ to $\frac{1}{360}$	"		141 78	63 31	5 97	181 88	210 90	104 61	155 58	18 22	97 41	22 56	30 93	
5	Steepest gradient worked—														
	(a) Length	Miles		0 15	1 32	2 00	13' 34	5' 00	2 10	0 80	2 53	13' 65	0 10	8 54	
	(b) Inclination			$\frac{1}{60}$	$\frac{1}{40}$	$\frac{1}{5}$	$\frac{1}{360}$	$\frac{1}{60}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	
FINANCIAL RESULTS															
6	Capital outlay per mile open	Rs	1st half	1 20	2 96	4 18	1 81	4 00	5 11	1 06	2 11	3 10	2 53	2 26	-0 15
			2nd "		2 25	3 30	3 44	1 52	3 18	1 65	1 06	3 15	2 45	1 13	0 30
7	Percentage of net earnings for each half year on paid up capital	Per cent	1st half	1 23	2 95	2 80				1 98	2 16	2 01	2 70		
			2nd "		2 25	2 69				1 67	1 95				
OUTLAY, EARNINGS AND EXPENSES															
	(Exclusive of Steam boat Service)														
8	Capital outlay per mile open	Rs	1st half	1,07,102	1,42,619	1,99,705	2,64,981	2,28,153	1,01,13	1,39,003	1,40,521	1,29,607	1,45,792	1,19,027	1,53,505
			2nd "		1,16,720	1,89,098	2,22,197	2,29,109	2,02,605	1,19,019	1,39,127	1,26,757	1,13,172	1,20,254	1,50,188
9	Total earnings per mile open per week		1st half	181	293	555	578	680	172	29	257	378	206	78	
			2nd "		211	460	635	636	374	280	215	298	220	93	
10	Total working expenses per mile open per week		1st half	138	124	222	367	237	208	167	85	164	144	87	
			2nd "		111	213	316	233	201	167	85	155	137	80	
11	Total earnings per train mile		1st half	3 38	4 56	6 67	4 18	4 92	4 44	4 08	4 97	3 83	3 31	2 20	
			2nd "		3 99	5 93	4 81	4 64	3 64	3 08	4 51	3 52	3 00	2 51	
12	Total working expenses per train mile		1st half	2 58	1 93	2 66	2 06	1 71	1 96	2 36	1 64	1 86	1 90	2 43	
			2nd "		1 81	2 75	2 39	1 70	2 06	2 37	1 59	1 83	1 80	2 04	
13	Net earnings per train mile		1st half	0 80	2 63	4 01	1 52	3 21	2 48	1 72	3 33	1 97	1 41	-0 23	
			2nd "		2 18	3 18	2 42	2 94	1 78	1 61	2 95	1 69	1 21	0 17	
14	Cost per 1,000 gross ton miles moved, (freight and dead weight)		1st half	11 69	4 76	6 41	7 38	3 36	5 54	6 61	3 92	5 05	5 87	14 07	
			2nd "		5 03	7 17	6 53	3 50	6 20	6 73	4 01	5 25	5 22	9 55	
15	Percentage of total working expenses on total earnings	Per cent	1st half	76 20	12 27	39 89	63 57	34 80	41 15	57 85	33 08	49 31	57 51	110 58	
			2nd "		15 47	46 38	19 76	36 64	53 66	59 51	34 92	51 98	59 77	81 22	
16	Percentage of total working expenses on total earnings, excluding from both sides of the account the charges for carriage of revenue stores	Per cent	1st half	75 79	41 06	39 27	63 97	33 32	42 69	56 65	32 82	46 94	55 32	111 23	
			2nd "		48 61	45 76	149 53	31 91	52 31	58 95	31 64	48 86	58 57	80 68	
	(Inclusive of Steam boat Service)														
17	Percentage of total working expenses on total earnings (for details, see items 123-129) Per cent	1st half	76 20	42 76	39 89	63 57	34 95	44 15	57 85	33 08	48 70	57 51	111 11		
		2nd "			46 65	46 33	49 76	36 96	53 66	59 51	34 92	51 98	59 77	81 23	

DIX 18.

(by systems) during each half-year of 1905

do not prepare these statistics

3' 8 ³ "													2' 6"				GAUGE	
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (e)	18 (a) to (c)	11 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number	Serial number	
Bengal and North Western.	Bhav nagar Gondal Juna gad Por bandar	Burma	Eastern Bengal	Hyderabad Godavari Valley	Jodhpur Bilawal	Northern khali (Bengal)	Rajputana Malwa	Rohilkund and Kumaon	South Indian	South Maharrata	Udaipur Chitor	Jubbulpore Gondia extension	Kalka Simla	Khushal garh Kohat Thal and Nowshera Durgai	Rupur Dhamtari	Calendar year 1905		
3' 3 ³ "	3' 3 ¹ '	3' 3 ¹ "	2' 6'	2' 6"	2' 6"	2' 6"	1											
1,547 19	155 45	1,310 15	766 24	391 13	832 63	34 90	2,050 63	281 21	1,853 47	1,695 44	68 72	223 75	59 41	131 98	56 24		2	
276	61	230	188	47	85	11	291	47	236	213	7	27	20	21	8		3	
	1 83	61 52	0 37				3 10		0 01	15 06			6 00	0 96				
	0 28	31 83	0 64				0 23	6 41	14 81	73 42		23 81	2 38					
0 17	1 68	47 78	2 05				18 75	8 56	130 82	519 73	1 10	58 53	9 94	43 55			4	
2 27	123 76	155 32	21 20	221 73	168 36	7 45	360 44	4 40	243 71	265 66	90 75	37 29	3 10	36 24	18 60			
2 16	64 74	107 78	15 09	18 95	61 24	0 67	173 72	6 83	103 56	98 39	6 98	13 89		22 74	1 95			
0 17	1 83	9 81	0 83	5 41	2 31	0 58	3 49	3 00	0 01	15 06	0 16	0 07	27 61	9 43	2 41			
1 35	2 ¹ ₂	2 ¹ ₂	1 ¹ ₂	1 ¹ ₂	5													
																	Calendar year 1905 by half years	
3 41	3 18	6 01	1 95	3 55	4 52	-0 03	5 61	3 97	3 27	1 75	2 48	0 65	0 77	-0 88	2 44	1st half	6	
2 57	1 29	1 57	3 98	1 17	4 97		1 70	3 95	3 41	1 89	2 02	0 54	1 52	-0 71	0 89	2nd „		
				3 48	1 46								0 57	0 78	2 44	1st half	7	
													0 51	1 54	0 89	2nd „		
76,882	49,830	97,126	93,470	66,866	25,509	60,905	73,146	47,353	77,212	79,426	30,720	43,225	2,79,202	64,268	24,823	1st half	8	
78,011	49,623	97,727	91,333	67,001	25,520		73,093	47,829	77,874	84 510	80,720	51,381	2,87,815	65,050	24,823	2nd „		
166	105	252	178	179	78	39	284	183	201	137	56	38	214	44	44	1st half	9	
141	83	199	226	118	85	36	253	130	200	123	63	47	273	53	30	2nd „		
62	44	135	104	87	33	37	115	60	102	81	27	28	128	64	20	1st half	10	
62	47	137	91	71	36	37	116	74	95	77	33	36	99	69	21	2nd „		
2 57	4 27	3 62	3 14	3 38	3 22	1 52	3 81	3 01	3 20	2 80	3 78	2 07	3 91	1 12	2 03	1st half	11	
2 59	3 61	3 94	3 77	2 68	3 54	1 38	3 70	3 18	2 92	2 51	3 98	2 25	5 30	0 99	1 39	2nd „		
1 03	1 81	1 93	1 81	1 61	1 37	1 41	1 54	1 35	1 62	1 65	1 81	1 19	2 31	1 64	0 97	1st half	12	
1 12	2 03	2 02	1 52	1 86	1 41	1 41	1 69	1 79	1 38	1 57	2 03	1 74	1 93	1 29	1 00	2nd „		
1 70	2 46	1 69	1 30	1 74	1 85	0 11	2 27	1 67	1 58	1 15	1 96	0 58	1 56	-0 52	1 11	1st half	13	
1 17	1 56	0 92	2 25	0 97	1 93	-0 03	2 01	1 34	1 54	0 94	1 89	0 51	3 37	-0 30	0 39	2nd „		
4 67	9 28	8 66	9 12	7 61	6 26	11 70	6 15	7 27	8 50	8 54	9 82	8 26	32 63	22 29	10 07	1st half	14	
5 06	11 35	9 33	6 73	9 44	6 58	11 73	7 23	9 16	7 20	8 14	10 39	9 42	21 96	21 51	13 36	and „		
37 53	12 36	53 43	58 56	48 15	42 39	93 30	40 73	4 77	50 61	58 99	47 77	72 01	59 97	146 91	46 69	1st half	15	
43 12	56 64	68 62	49 36	63 79	12 25	102 17	45 75	57 29	47 37	63 54	52 37	77 43	36 35	130 53	71 64	2nd „		
36 19	12 20	52 25	55 57	46 79	41 70	93 30	39 06	41 18	50 02	57 75	47 75	68 63	50 56	131 05	19 92	1st half	16	
42 00	56 32	67 19	39 19	63 79	41 96	102 17	44 62	56 91	46 78	61 07	52 25	74 12	36 17	147 94	67 97	2nd „		
39 82	42 86	54 03	61 27	48 45	42 39	93 30	10 23	41 30	50 61	58 99	47 77	72 04	50 97	150 23	46 69	1st half	17	
46 16	56 64	63 75	12 04	65 70	42 25	102 17	10 73	42 63	47 37	62 54	52 87	77 43	36 35	134 10	71 64	2nd „		

Analysis of working of each railway

NOTE.—Railways not shown

Serial number	Particulars	Gauge	5' 6"										11 (a)	
		Number	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)			
		Calend dar year 1905 by half years	Bengal Central	Bengal Nagpur	Bom bay, Baroda and Central India	Eastern Bengal	Fast Indian	Great Indian Peninsula	Madras	Nizam's Gumna State	North West ern	Oudh and Rohilkhand		
DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC														
18	Total working expenses for both coaching and goods traffic excluding steam boat expenses, and after deducting telegraph and sundry receipts (in thousands of Rs)	Rs {	1st half	4,11	52,14	45,74	23,92	1,84,10	1,51,02	58,88	7,17	1,57,44	41,74	16,00
	Proportions, dividing expenditure in ratio of gross ton mileage (freight and dead load)—		2nd „		46,08	44,66	35,78	1,32,48	1,46,69	58,43	7,13	1,54,03	89,35	14,26
19	Coaching in thousands of Rs	„ {	1st half	2,62	12,78	17,68	11,40	33,44	46,01	17,55	1,70	43,28	18,99	7,14
20	Goods in thousands of Rs	„ {	2nd „	1,49	39,36	28,06	12,52	1,00,66	1,04,98	40,83	5,47	1,14,10	22,75	8,86
					32,67	24,71	21,86	94,59	90,69	40,54	5,37	1,02,02	20,98	9,52
COACHING TRAFFIC														
Gross receipts and train mileage (in thousands)—														
21	Receipts from coaching traffic Rs {	1st half	4,22	36,65	37,81	18,60	1,16,96	81,90	38,51	5,29	96,16	35,79	7,94	
	2nd „			37,62	36,79	23,41	1,22,32	91,37	35,37	5,56	1,03,82	36,22	6,94	
22	Coaching train miles run No {	1st half	127	1,025	1,000	619	3,376	3,457	1,0,7	142	3,781	1,448	272	
23	Average coaching receipts per train mile Ps {	1st half	3.33	3.57	3.47	3.00	3.46	2.46	3.64	3.73	2.54	2.47	2.91	
	2nd „			3.36	3.28	2.65	3.39	2.49	3.81	3.86	2.51	2.93	2.48	
UNITS AND UNIT MILEAGE														
Number of units carried one mile (in thousands)—														
24	1st class Unit miles {	1st half	54	1,392	2,143	1,079	5,107	6,657	2,421	292	4,067	1,836	216	
	2nd „			1,318	1,867	1,022	5,028	9,353	2,237	289	4,906	1,823	214	
25	2nd „ „ {	1st half	269	3,134	14,193	2,221	12,178	28,916	7,924	2,316	12,770	4,791	466	
	2nd „			3,931	12,080	3,015	12,410	31,417	9,674	2,183	15,836	5,638	443	
26	3rd or intermediate class „ {	1st half	1,242	7,709	16,980	12,744	51,118	55,801	2,483	4,401	44,146	21,450	412	
	2nd „			9,008	17,488	14,987	54,925	62,041	2,186	4,478	49,653	21,969	383	
27	4th or lowest „ „ {	1st half	22,435	241,053	224,022	103,241	720,994	449,198	246,535	29,282	617,345	206,582	13,679	
	2nd „			241,457	209,141	131,431	764,710	470,312	233,187	31,018	650,933	205,683	37,966	
28	Total passenger unit mileage, „ {	1st half	24,000	253,288	257,398	119,288	789,397	510,572	259,363	36,291	678,328	234,650	44,803	
	2nd „			255,744	240,596	150,455	837,073	573,123	249,284	37,908	720,828	223,113	39,036	
29	Other coaching traffic Ton miles {	1st half	158	1,394	3,155	751	9,730	8,670	3,176	498	5,970	1,660	341	
	2nd „			1,919	3,295	873	9,351	8,572	2,318	495	7,035	1,835	315	
Average sum received for carrying a unit one mile—														
30	1st class Pcs {	1st half	14,30	14,61	9,98	13,63	14,76	11,60	12,48	15,80	11,66	11,81	16,18	
	2nd „			13,19	10,28	13,50	14,89	10,83	12,41	15,51	11,26	11,90	15,92	
31	2nd „ „ {	1st half	7,44	6,81	4,55	6,76	6,51	4,33	5,04	4,68	4,75	5,39	7,87	
	2nd „			6,25	4,99	6,81	6,96	4,56	4,17	4,63	4,80	5,47	7,79	
32	3rd or intermediate class „ {	1st half	3,53	3,39	2,99	3,00	3,26	2,99	4,50	2,50	3,02	3,03	4,06	
	2nd „			3,21	3,00	2,95	3,27	2,97	4,50	2,50	3,01	3,03	4,05	
33	4th or lowest „ „ {	1st half	3,00	2,41	2,23	2,46	2,21	2,15	2,25	1,99	2,26	2,45	2,94	
	2nd „			2,39	2,31	2,50	2,22	2,15	2,22	1,99	2,26	2,44	2,91	
34	Average for all classes „ {	1st half	3,10	2,56	2,48	2,70	2,45	2,47	2,46	2,84	2,42	2,64	3,08	
	2nd „			2,54	2,56	2,70	2,43	2,51	2,41	2,31	2,13	2,64	3,06	
35	Other coaching traffic per ton „ {	1st half	41,04	40,22	28,36	47,00	31,71	33,97	32,20	33,86	38,08	41,33	42,54	
	2nd „			38,01	27,80	50,09	33,38	36,69	38,66	38,59	34,72	40,67	41,37	

DIX 18—continued

(by systems) during each half-year of 1905—contd.

do not prepare these statistics

3' 3"													2' 6"				Gauge
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	11 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23(a)	1 (b)	30 (a)	9(g) & (h)	1 (e)	Number	
Bengal and North West ern	Bhav nagar Gondal Junagadh Por bandar	Burma,	Eastorn Bengal	Hyder abid Goua vari Valley	Jodh pur Bil aner	Nan khali (Ben gal)	Raj putana Malwa	Rohil kund Ku maon	South Indian	South ern Mah ratta	Udaipur Chitor	Jubb pore Gondia exten sion	Kalka Simla	Khushal garh Kohat Thal and Nowshora Durgal	Raipur Dham tari.	Calendar year 1905 by half years	Serial number
21,12 23,15	4 60 5 28	15 72 46,53	19 75 17,80	8 95 7,15	6 88 7,53	33	57,01 60,27	4 37 5,48	34 82 32,12	34,06 33,40	45	1,63 2,14	1,92 1,43	2,19 2,34	29 31	1st half 2nd ,	{ 18
9,99 11,70	2,42 3,15	16,49 18,00	7,82 6,19	2 65 1,43	2,86 3,92	27	10 47 22,06	1 69 2,31	16 83 14,57	10,81 12,24	31	46 41	82 61	92 1,02	7 10	1st half 2nd ,	{ 19
14,22 11,75	2,57 2,13	20,23 28,53	11,93 11,31	5,50 3,72	4 02 4,91	6	40,54 37,61	2 63 3,17	17,99 17,55	23,25 21,16	14	1,17 1,45	1,10 1,45	1,27 1,32	22 21	1st half 2nd ,	{ 20
29,39 29,29	6 67 6,18	88 75 30,62	17,19 18,04	4 68 4,71	6 35 7,69	80	41 77 49,58	4 23 4,37	30,84 37,39	21,99 21,55	50	60 73	1,90 2,47	87 1,08	25 22	1st half 2nd ,	{ 21
1,165 1,234	162 179	972 950	612 612	18, 199	213 74	19	1,63 1,628	152 146	1 102 1,232	772 924	18	32 41	32 33	65 76	12 15	1st half 2nd ,	{ 22
2 52 2 28	4 23 3 62	7 99 3 14	2 51 2 81	2 62 2 37	2 61 2 61	1 58 1 39	2 56 2 71	2 79 2 99	3 34 3 03	2 65 2 93	3 24 3 79	1 90 2 69	5 94 7 89	1 34 1 42	2 15 1 49	1st half 2nd ,	{ 23
481 433	219 194	1,721 1,232	516 408	151 156	167 214	2	1,272 1,063	163 153	1 111 1 096	8 00 928	19 19	12 29	120 156	44 54	3 2	1st half 2nd ,	{ 24
1,002 3,194	1,200 1,236	3,519 3,059	1,136 1,904	1,771 1,694	806 806	15	3,831 4,260	815 1,057	5 109 3,926	3,331 3,012	50 71	25 60	193 226	65 88	7 4	1st half 2nd ,	{ 25
4,538 5,060	1,397 1,225	7,313 8,665		1,951 1,899	19	10 766 10,792	2 68 272				21 61			74 43	25 21	1st half 2nd ,	{ 26
235,182 250,729	37,604 35,607	219,924 171,416	105,683 102,006	77,019 36,124	46,003 57,003	1,810 1,506	319,229 390,530	27,221 27,116	378,263 314,210	157,975 158,434	4,780 6,030	5,105 9,511	1,822 1,906	6,306 8,079	1,449 1,281	1st half 2nd ,	{ 27
261,246 257,416	40,610 38,963	224,777 175,767	115,078 113,078	30,004 33,274	49,530 60,021	1,810 1,512	334,098 406,615	28,167 28,093	244,782 310,162	162,199 162,404	4,858 6,123	5,253 9,661	2,135 2,283	6,579 8,264	1,484 1,303	1st half 2nd ,	{ 28
593 861	264 233	903 993	555 930	252 173	322 372	4	3,028 3,978	147 143	637 804	1,270 1,129	30 28	13 30	41 58	18 33	4 5	1st half 2nd ,	{ 29
12,84 12,68	11 45 11 44	15 50 15 39	14 33 13 99	11 11 11 93	13 98 19 91	14 86 15 09	14 11 13 81	26 37 28 19	11 75 11 78	15 63 15 41	17 96 17 33	15 21 15 28	49 82 49 83	11 79 11 58	16 94 15 44	1st half 2nd ,	{ 30
6 23 6 20	5 68 5 67	7 86 8 19	6 75 5 97	4 53 4 88	6 57 6 71	7 47 7 71	6 42 6 61	9 20 8 67	4 60 5 82	6 23 6 17	8 99 9 00	7 89 7 86	27 48 27 48	5 80 5 68	7 98 7 37	1st half 2nd ,	{ 31
3 12 3 16	4 00 4 00	3 09 2 98		2 85 2 89	3 64 3 85	2 98 2 99	4 01 4 01					4 50 3 53		3 00 3 00	4 50 4 45	1st half 2nd ,	{ 32
2 00 2 00	2 75 2 75	3 00 2 99	2 50 2 50	2 00 2 00	2 06 2 06	3 00 3 00	2 01 2 01	2 18 2 20	2 03 2 05	2 09 2 08	1 90 1 99	2 00 2 00	9 00 9 00	2 25 2 25	3 00 3 00	1st half 2nd ,	{ 33
2 05 2 06	2 93 2 93	3 15 3 17	2 64 2 65	2 16 2 17	2 20 2 19	3 06 3 07	2 14 2 11	2 54 2 59	2 10 2 12	2 25 2 24	2 12 2 12	2 07 2 09	12 94 18 57	2 36 2 85	3 07 3 05	1st half 2nd ,	{ 34
46,33 38,01	48 04 47 99	38,92 34 74	47 11 50 71	37 59 43 16	39 82 42 89	51 04 51 19	28 66 27 34	61 35 67 33	49 89 49 87	41 71 44 65	31 43 32 79	55 92 42 98	213 30 195 91	67 90 33 47	59 48 43 85	1st half 2nd ,	{ 35

Analysis of working of each railway

NOTE—Railways not shown

Serial number	PARTICULARS	GAUGE	5' 6"												
			Num ber	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)			
			Calen dar year 1905 by half years	Bengal Central	Bengal Nagpur	Bom bay, Baroda and Central India	East Bengal	East Indian	Great Indian Penin sula	Madras	Nizam's Guan tee State	North West ern	Oudh and Rohil khand.		
COACHING TRAFFIC—contd															
UNITS AND UNIT MILEAGE—contd															
Average number of units in a train—															
36	1st class	No {	1st half	0 42	1 36	1 97	1 74	1 51	1 93	2 29	0 95	1 07	1 27	0 90	
			2nd „		1 21	1 66	1 15	1 39	2 55	2 08	0 92	1 19	1 17	0 87	
37	2nd „	" {	1st half	2 12	3 05	13 02	3 59	3 61	8 36	7 50	7 50	3 38	3 31	1 71	
			2nd „		3 51	10 76	3 41	3 44	6 57	8 99	6 98	3 70	3 63	1 58	
38	3rd or intermediate class	" {	1st half	9 80	7 52	15 58	20 57	15 14	16 14	2 35		11 07	14 81	1 51	
			2nd „		8 05	15 58	16 96	15 20	16 93	2 03		11 99	14 15	1 57	
39	4th or lowest	" {	1st half	176 97	235 10	205 56	166 68	213 55	129 92	233 24	110 38	163 15	142 72	160 33	
			2nd „		215 85	186 31	148 69	211 68	128 81	218 54	113 46	157 18	182 50	135 65	
40	Total passenger units	" {	1st half	189 31	247 03	236 13	192 58	283 81	156 35	245 38	118 92	179 27	162 11	161 45	
			2nd „		228 62	214 31	170 21	231 71	156 36	231 64	121 86	174 06	151 45	139 47	
41	Other coaching traffic	Tons {	1st half		1 25	1 36	2 90	1 21	2 88	2 51	3 00	1 63	1 58	1 25	
			2nd „			1 71	2 91	0 99	2 59	2 84	2 15	1 53	1 70	1 18	
VEHICLES AND VEHICLE MILEAGE—															
Number of coaching vehicles hauled one mile (in thousands)—															
42	1st class	Vehicle miles {	1st half	91	1 224	927	694	4 308	5 063	1 376	358	4 133	1 804	398	
			2nd „		1 247	950	684	4 527	5 630	1 366	361	4 707	1 815	420	
43	2nd „	" {	1st half	132	1 160	2 093	649	4 745	5 765	1 627	395	4 099	1 502	391	
			2nd „		1 235	2 094	972	5 057	6 280	1 597	359	4 784	1 675	418	
44	3rd or intermediate class	" {	1st half	166	1 096	799	1 359	4 619	3 641	262		4 821	2 457	357	
			2nd „		1 135	913	1 767	5 435	4 633	256		5 237	2 526	194	
45	4th or lowest	" {	1st half	931	10,519	8,926	4,589	30,610	20,529	9,551	1,624	31,308	9,616	2,901	
			2nd „		9,569	8,920	6,488	33,477	21,998	9,663	1,674	32,926	10,119	3,044	
46	Other vehicles	" {	1st half	253	986	1,778	981	5,265	5,906	1,485	161	3,205	855	498	
			2nd „		959	1,860	1,310	4,965	6,056	1,419	168	4,278	812	519	
47	Brake vans	" {	1st half	175	1,863	1,493	674	6,114	6,040	2,277	363	6,181	2,522	296	
			2nd „		1,887	1,464	1,025	6,321	6,318	2,347	363	6,235	2,586	296	
48	Total	" {	1st half	1,748	16,818	16,016	8,946	55,604	46,944	16,578	2,901	53,747	18,816	4,836	
			2nd „		16,052	16,181	12,546	59,782	50,815	16,648	2,925	55,167	19,563	4,891	
Average number of vehicles in a coaching train—															
49	1st class	No {	1st half	0 72	1 20	0 85	1 12	1 27	1 46	1 30	1 17	1 09	1 25	1 14	
			2nd „		1 11	0 83	1 11	1 25	1 54	1 27	1 15	1 14	1 19	1 50	
50	2nd „	" {	1st half	1 04	1 13	1 92	1 05	1 41	1 67	1 54	1 30	1 08	1 04	1 43	
			2nd „		1 10	1 86	1 10	1 40	1 71	1 48	1 15	1 16	1 08	1 49	
51	3rd or intermediate class	" {	1st half	1 31	1 07	0 74	2 19	1 37	1 05	0 25		1 27	1 72	1 31	
			2nd „		1 01	0 81	2 00	1 50	1 10	0 24		1 26	1 62	0 69	
52	4th or lowest	" {	1st half	7 31	10 26	8 19	7 41	9 07	5 04	9 04	5 32	8 28	6 66	10 65	
			2nd „		8 57	7 95	7 34	9 27	6 00	8 98	5 35	7 95	6 52	10 88	
53	Other vehicles	" {	1st half	2 00	0 95	1 63	1 58	1 56	1 71	1 40	0 53	0 85	0 39	1 83	
			2nd „		0 86	1 66	1 43	1 37	1 70	1 32	0 54	1 03	0 52	1 85	
54	Brake vans	" {	1st half	1 33	1 82	1 87	1 09	1 81	1 75	2 15	1 19	1 63	1 74	1 09	
			2nd „		1 69	1 30	1 16	1 70	1 72	2 18	1 16	1 51	1 67	1 06	
55	Total	" {	1st half	13 79	16 43	14 70	11 44	16 49	13 58	15 68	9 51	14 20	13 00	17 75	
			2nd „		14 31	14 41	14 19	16 54	13 86	15 47	9 35				
Average earnings per coaching vehicle per mile—															
56	1st class	Pics {	1st half	8 45	16 62	23 07	21 19	17 50	15 25	21 96	12 88	11 48	12 02	10 11	
			2nd „		14 26	20 64	14 12	16 54	16 00	20 32	12 41	11 74	11 76	9 25	
57	2nd „	" {	1st half	15 12	18 39	30 83	29 18	16 70	21 74	24 55	27 40	14 78	17 19	9 8	
			2nd „		19 61	28 76	19 60	17 08	22 79	25 25	28 13	15 40	18 11	8 02	
58	3rd or intermediate class	" {	1st half	26 44	23 65	63 53	28 09	36 09	45 85	42 62		27 62	26 10	4 69	
			2nd „		23 55	57 41	25 03	3 05	45 75	38 37		28 58	26 32	7 98	
59	4th or lowest	" {	1st half	70 16	55 11	56 07	55 31	52 78	47 05	53 20	42 70	43 60	44 62	52 18	
			2nd „		60 27	54 13	50 01	50 65	45 95	54 14		44 68	49 39	36 26	
60	Other vehicles	" {	1st half	25 00	56 83	50 23	35 96	58 70	19 67	68 87	10 95	64 99	50 29	29 18	
			2nd „		76 11	49 26	33 39	62 89	17 07	63 16	11 11	57 10	91 69	26 94	

DIX 18—continued

(by systems) during each half-year of 1905—contd

do not prepare these statistics

3' 8½"												2' 6"				GAUGE		
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (c)	11 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number	Serial number	
Bengal and North Western	Bhav nagar Gondal Juna gar Por bandar	Burma	Eastern Bengal	Hydera bid Go davari Valley	Jodh pur Bikaner	Noa khali (Bengal)	Raj putana Malwa	Rohil kund and Kum on	South Indian	Sou thern Mahrat ta	Udaipur Chitor	Jubbul pore Gondia exten sion	Kalka Simla	Khushal gach Ko hat Thal and Now shera Durgai	Ranpur Dhamtari	Calendar year 1905 by half years		
042 034	135 108	137 126	084 078	063 051	069 078	008 018	078 058	107 105	093 081	115 101	106 097	039 071	377 466	068 071	024 012	1st half 2nd „	{ 38	
091 093	801 690	362 315	251 297	619 547	331 291	079 085	235 233	588 724	454 319	422 329	284 388	077 141	602 676	099 115	058 027	1st half 2nd „	{ 37	
369 391	861 741	12.00 13.0			803 731	097 093	660 590	177 186		~		067 146		113 057	218 143	1st half 2nd „	{ 38	
218 99 195 30	232 19 200 58	226 35 171 91	172 68 158 99	129 25 117 68	191 57 208 81	91 52 81 67	195 04 218 63	179 55 185 65	283 69 255 07	204 74 171 37	272 52 315 05	163 50 229 38	56 97 57 01	98 30 106 08	124 63 86 76	1st half 2nd „	{ 39	
224 24 200 51	250 16 215 97	231 31 179 32	188 03 176 23	136 07 123 66	203 60 219 34	96 36 83 58	201 77 222 44	187 77 195 80	289 36 259 07	210 21 15 67	276 42 319 90	165 33 232 99	66 76 68 43	101 10 108 51	127 63 188 53	1st half 2nd „	{ 40	
051 067	163 130	093 101	091 145	088 056	132 136	019 019	186 184	097 093	070 065	165 122	170 146	042 072	129 172	023 043	034 036	1st half 2nd „	{ 41	
2,012 2,177	271 281	1,511 1,508	807 799	341 360	357 367	14 14	2,248 2,451	231 247	1,179 1,205	1,207 1,287	21 21	42 45	34 36	6 5	1st half 2nd „	{ 42		
1,862 1,929	381 419	1,776 1,788	671 726	369 393	361 359	18 11	2,151 2,381	205 229	1,447 1,421	1,236 1,310	20 26	42 56	34 47	5 5	1st half 2nd „	{ 43		
2,067 2,147	269 296	1,260 1,448			493 413	23 10	1,170 1,170	116 144				21 32	91 33		1st half 2nd „	{ 44		
18,217 19,767	2,205 2,294	14,812 14,600	5,680 6,516	1,960 1,790	3,143 3,590	163 155	21,303 25,512	1,993 1,989	16,737 16,914	9,765 10,974	264 315	652 866	125 151	492 522	123 118	1st half 2nd „	{ 45	
469 459	128 131	894 980	832 1,320	158 139	321 353		1,423 1,629	60 68	1,976 2,013	991 1,055	7 8	25 33		38 82	8 8	1st half 2nd „	{ 46	
2,707 2,924	414 413	1,313 1,359	687 705	298 292	845 859	27 26	3,964 4,259	291 292	1,230 1,209	1,423 1,631	56 55	18 21	83 82	63 59	16 20	1st half 2nd „	{ 47	
27,334 29,403	3,631 3,861	20,306 20,235	10,137 11,514	3,149 2,974	5,462 5,971	240 219	32,354 37,602	2,896 2,969	22,569 22,762	14,622 16,307	368 425	810 1,064	275 325	712 767	163 156	1st half 2nd „	{ 48	
175 169	169 157	156 154	132 124	120 117	147 134	070 074	138 134	152 169	099 098	156 139	118 111	132 136	103 133	053 047	047 036	1st half 2nd „	{ 49	
160 150	236 233	158 182	110 113	129 127	148 131	070 075	132 130	135 157	121 115	160 142	114 133	132 136	106 142	053 046	047 036	1st half 2nd „	{ 50	
178 167	178 165		206 225		178 162	110 055	072 064	077 099				066 077	048 043			1st half 2nd „	{ 51	
1566 1540	1358 1282	1524 1189	960 1016	691 578	1392 1312	851 839	1311 1896	1814 1862	1405 1873	1266 1187	1505 1645	2083 2088	393 450	755 685	10,98 800	800 685	1st half 2nd „	{ 52
035 036	079 073	092 100	136 206	055 045	133 129	002 002	087 100	040 046	166 164	129 114	038 044	079 078			058 108	071 050	1st half 2nd „	{ 53
2232 2223	255 248	135 139	112 110	104 094	347 314	140 140	243 233	192 200	103 098	184 182	318 285	056 050	259 246	128 128	136 077	137 137	1st half 2nd „	{ 54
2346 2290	2275 2158	2030 2064	1656 1791	1099 961	2245 2182	1252 1185	1983 2057	1910 2033	1894 1848	1895 1764	2093 2218	2548 2565	861 971	1095 1064	1399 1059	1st half 2nd „	{ 55	
304 256	914 790	1358 1257	918 871	601 520	653 809	180 269	798 599	1857 1740	1107 973	1153 1112	1606 1533	451 74	18107 20081	1501 1735	878 522	1st half 2nd „	{ 56	
365 383	1923 1673	1558 1416	1545 1570	2178 2101	1465 1507	842 867	1143 1187	3657 4007	1721 1610	1680 1434	2234 2615	460 832	15665 13684	1090 1431	987 537	1st half 2nd „	{ 57	
681 740	1930 1795		1751 1783		1287 1303	315 647	2747 2759	923 757		~		455 669	712 390			1st half 2nd „	{ 58	
2794 2533	4702 4304	4160 3518	4493 3914	3743 4068	3052 3274	3329 2921	2995 3075	2970 2999	4094 3802	3889 3809	3613 3818	1570 2197	18048 13295	2928 3485	3493 3382	1st half 2nd „	{ 59	
6722 7135	9917 8537	3932 3526	3139 3571	6004 5373	3955 4521		6075 5042	14904 14282	2118 1993	5726 4778	14037 10743	2928 3913	10642 13658	3241 1547	2876 3138	1st half 2nd „	{ 60	

Analysis of working of each railway

NOTE.—Railways not shor

Serial number	Particulars	Gauge	5' 6'										11 (a)
		Number	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)		
		Calendar year 1905 by half years	Bengal Central	Bengal Nagpur	Bom bay Baroda and Central India	Eastern Bengal	East Indian	Great Indian Peninsula	Madras	Nizam's Guarnteed State	North West ern	Ondh and Rohil Lhand	Aesar Bengal
	COACHING TRAFFIC—contd VEHICLES AND VEHICLE MILEAGE— concl Carrying capacity hauled one mile (excluding brakemen) (in thousands)—												
61	1st class Seats { 1st half	1,506	10,847	23,214	15,111	60,300	67,310	13,750	4,916	64,603	39,214	4,59	
	2nd „ „		10,487	22,474	21,120	63,670	79,300	12,697	4,832	76,125	10,124	4,91	
62	2nd „ „	2,551	15,463	78,051	15,627	105,667	155,342	27,001	8,580	81,142	33,161	4,56	
63	3rd or intermediate class „ „	8,960	36,186	36,026	60,185	212,493	196,498	10,801	69,652	168,510	66,777	7,82	
		38,105	40,997	83,590	233,642	221,385	10,104	91,845	180,377	88,110	5,34		
64	4th or lowest class „ „	50,885	569,757	500,535	259,927	1,763,218	1,078,117	550,874	1,662,398	550,542	103,03		
		516,104	491,111	306,900	1,913,881	1,111,040	566,134		1,743,812	588,203	107,00		
65	Other vehicles Tons { 1st half	3,038	8,407	8,671	9,890	51,049	29,608	8,982	875	40,906	23,390	1,53	
	2nd „ „		8,293	19,016	16,680	46,601	32,257	8,279	931	56,595	23,649	1,53	
	Percentage of freight upon capacity hauled—												
66	1st class Per cent { 1st half	3.57	13.46	9.22	7.13	8.16	9.82	16.99	5.04	6.30	4.68	5.31	
	2nd „ „		12.84	8.31	4.81	7.90	11.79	17.31	5.04	6.15	4.54	4.97	
67	2nd „ „	10.53	20.27	18.18	14.23	11.53	18.61	28.71	27.00	15.74	14.45	10.21	
68	3rd or intermediate class „ „	18.67	21.30	47.13	21.17	24.06	28.10	23.89	37.57	26.20	24.72	5.27	
69	4th or lowest class „ „	44.09	42.31	41.76	39.72	40.78	43.27	44.03	38.65	21.53	21.93	7.30	
70	Other vehicles „ „	5.20	16.58	35.57	7.50	18.00	29.28	35.75	56.67	14.60	7.10	22.27	
		23.15	32.00	5.23	20.07	26.68	28.00	53.19	12.43	7.76	19.87		
	WEIGHT OF TRAIN AND TON MILEAGE												
	Gross ton mileage of all coaching trains (in thousands)—												
71	Freight Ton miles { 1st half	1,117	16,710	18,69	7,996	57,541	41,910	18,992	3,733	47,098	15,960	3,049	
	2nd „ „		17,397	18,047	10,002	60,026	43,902	17,558	2,829	50,788	16,128	2,676	
72	Dead weight „ „	26,286	251,958	256,692	116,359	938,043	789,193	216,509	40,655	809,129	337,599	47,072	
			248,895	260,115	203,111	1,021,463	88,557	247,723	41,103	882,063	33,052	46,923	
73	Total „ „	27,683	263,668	275,861	151,855	935,594	831,142	265,501	43,988	856,527	353,508	50,721	
			266,292	278,162	213,113	1,081,189	902,510	263,281	43,932	932,656	360,210	49,604	
	Average weight of a coaching train—												
74	Freight Tons { 1st half	11.42	16.30	17.11	12.91	17.04	12.13	17.97	8.96	12.15	10.99	11.19	
	2nd „ „		15.6	16.07	11.31	16.62	11.93	16.31	9.04	12.20	10.89	9.56	
75	Dead weight „ „	206.95	245.73	235.72	236.29	277.84	228.26	233.21	183.22	213.92	233.23	174.99	
			222.49	231.70	229.78	282.75	234.23	230.19	181.38	213.60	227.15	167.66	
76	Total „ „	218.37	262.03	253.18	249.20	294.88	210.89	231.18	142.18	226.37	244.22	186.18	
			238.05	247.77	241.69	299.37	246.22	246.50	140.12	225.26	237.84	177.22	
	COST OF WORKING AND PROFITS—												
77	Average cost of hauling a coaching train one mile Rs { 1st half	2.06	1.25	1.62	1.84	0.99	1.33	1.66	1.20	1.11	1.31	2.62	
	2nd „ „		1.19	1.78	1.58	1.05	1.53	1.66	1.22	1.18	1.24	1.69	
78	Average cost of hauling a coaching vehicle with its load one mile Pies { 1st half	31.93	16.38	23.37	26.45	10.39	21.61	23.56	12.86	17.47	22.38	30.19	
	2nd „ „		18.17	26.03	23.20	11.00	21.16	21.03	13.20	18.12	21.79	19.79	
	Average cost of hauling a coaching unit one mile—												
79	Per passenger unit Pies { 1st half	1.83	0.90	1.18	1.57	0.73	1.42	1.19	0.81	1.15	1.48	2.75	
	2nd „ „		0.94	1.42	1.52	0.79	1.62	1.27	0.82	1.20	1.50	2.09	
80	Other traffic per ton „ „	39.79	10.84	11.73	42.20	6.63	13.61	9.29	4.71	9.12	10.03	39.92	
			8.19	12.86	44.93	6.72	16.88	12.18	5.06	10.45	8.99	29.61	
81	Average profit on working a coaching train one mile Rs { 1st half	1.27	2.32	1.85	1.16	2.47	1.13	1.93	2.53	1.40	1.16	0.29	
	2nd „ „		2.17	1.50	1.07	2.34	0.95	1.63	2.64	1.33	1.09	0.79	
82	1st class Pies { 1st half	-23.48	0.24	-0.30	-5.26	7.11	-6.30	-1.60	0.02	-5.99	-10.86	-20.08	
	2nd „ „		-3.91	-5.39	-9.08	5.54	-6.10	-3.71	-0.79	-6.33	-10.03	-10.54	
83	2nd „ „	-16.81	2.01	7.46	-3.27	6.31	-0.13	0.99	14.54	-2.69	-5.19	-20.81	
84	3rd or intermediate class „ „	-5.49	7.47	40.18	1.64	25.70	24.27	19.06	29.84	10.15	3.72	-25.50	
85	4th or lowest class „ „	38.23	38.73	32.70	28.89	42.39	25.44	34.64	30.40	10.46	4.53	-11.81	
86	Other vehicles „ „	-6.33	40.47	26.96	9.51	48.21	28.26	45.31	92.09	47.52	57.91	-1.01	
		57.94	23.23	10.19	51.68	23.81	39.13	100.91	38.98	70.10	7.15		

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DIX 18—continued.

(by systems) during each half year of 1905—contd

do not prepare these statistics

3 3"												2' 6'					Gauge
12 (a) & (b)	11 (a) to (d)	15 (a)	8 (b) & (c)	8 (c)	18 (a) to (c)	(11) (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (c)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number	Serial number
Bengal and North Western Gondal- Junnagad Porbandar	Bhav- nagar Gondal- Junnagad Porbandar	Burma	Eastern Bengal	Hyder- abad Goda- vari Valley	Jodh- pur-Bi- kun-	Noa- khali- (Bon- gal)	Rajpu- tan Malwa	Rohil- kund and ku- mion	South Indian	South- ern Mah- ratta	Udaipur Chitor	Jubbul- pore Gonda- exten- sion	Kella- Simla	Khushal- garh Ko- hat Thirl and Now- shera Durgai	Rajpar- Dhamtari	Calendar year 1905 by half- year	
18,059 20,092	2,800 2,912	15,077 15,141	9,014 8,906	6,467 6,758	3,072 3,831	144 150	22,391 23,917	2,767 2,971	11,002 11,517	9,662 10,491	207 270	126 147	406 450	426 498	33 32	1st half 2nd "	{ 61
27,703 28,441	5,167 5,520	20,378 29,648	8,027 8,707	8,311 9,027	4,336 4,305	114 149	25,618 28,51	2,460 2,746	16,006 16,631	15,198 16,239	211 307	126 169	594 811	426 488	33 32	1st half 2nd "	{ 62
44,783 40,203	3,921 4,071	23,408 27,623		11,154 11,398	490 276	29,301 29,290	2,279 3,265					84 113		901 261	3,993	1st half 2nd "	{ 63
537,072 580,321	65,421 69,829	440,196 438,911	171,567 169,509	96,122 95,400	96,098 111,061	5,778 5,493	700,961 632,301	71,143 73,671	512,214 548,678	313,805 353,416	7,665 9,173	20,010 24,071	3,016 3,613	11,803 12,612	3,707	1st half 2nd "	{ 64
1,110 1,484	498 511	2,835 3,09	5,095 6,070	833 611	3,960 4,126	1 1	7,655 9,840	220 283	4,855 5,117	2,761 3,046	27 34	88 114	823 829	113 244	12 11	1st half 2nd "	{ 65
2,55 2,15	781 667	878 814	573 558	280 231	455 559	112 164	568 415	567 514	1010 863	902 885	901 695	968 1999	2964 2334	1030 1057	864 564	1st half 2nd "	{ 66
394 420	2516 2239	1198 1042	1914 2193	2134 1877	1853 1872	1043 1035	1484 1491	3313 3850	3380 2361	2193 1873	2071 2451	1941 6529	3246 2691	1510 1798	2059 1260	1st half 2nd "	{ 67
1013 1095	3563 3258		3137 3137		1752 1754	380 621	3663 3684	1177 832				2558 5370		891 418	3694	1st half 2nd "	{ 68
4750 4321	5762 5142	4996 8951	6160 5383	3851 3818	4850 5183	8136 2748	4540 4691	3526 3681	6239 5725	5034 4483	6248 6570	2596 3951	6041 5476	5370 6390	3512	1st half 2nd "	{ 69
5344 5798	5306 4573	3185 3251	1089 1151	3030 2840	1251 902		3910 4428	6417 5070	1724 1572	4298 3706	11163 8182	1490 2638	1247 1749	1607 1354	2224 4770	1st half 2nd "	{ 70
			c														
16,309 16,347	2,735 2,536	14,513 11,653	7,511 7,742	2,635 2,510	8,016 8,998	115 96	23,197 27,900	1,877 1,886	21,076 20,072	11,104 10,071	323 329	178 612	416 533	93 84	1st half 2nd "	{ 71	
195,730 214,862	23,334 23,133	17,966 177,312	75,469 31,725	42,333 33,642	2,900 46,182	214,572 2,039	21,395 285,169	176,873 22,491	115,450 131,157	3,012 3,527	5,282 6,752	2303 2,512	3,731 4,221	649 680	1st half 2nd "	{ 72	
212,039 231,209	26,069 27,719	190,499 188,964	88,000 96,506	37,360 36,352	45,699 50,480	2,315 2,183	267,769 313,369	23,272 24,577	198,049 199,812	126,554 145,128	3,035 3,925	5,611 7,364	2,531 2,917	4,147 4,751	742 761	1st half 2nd "	{ 73
1400 1273	1685 1411	1194 1159	1227 1212	919 811	1363 1461	599 523	1422 1526	1238 1291	1819 1629	1439 1187	1839 2078	1037 1476	57 615	639 700	802 568	1st half 2nd "	{ 74
16800 16736	14374 14039	18112 18090	12335 13835	12114 10334	17122 11051	11186 11051	14990 15616	14112 15898	14803 14590	11963 14511	17138 18126	16621 15111	7358 6108	5731 5512	5583 4608	1st half 2nd "	{ 75
18200 18009	16059 15483	19606 19279	13562 15041	13033 11745	18785 18446	12085 11574	16112 17142	15330 16659	16621 16219	16102 15693	18077 20504	17658 17760	7915 8723	6373 6242	6385 5176	1st half 2nd "	{ 76
085 091	119 176	170 164	128 101	151 172	118 121	141 136	101 123	112 18	141 118	140 132	177 213	146 167	258 192	142 134	064 069	1st half 2nd "	{ 77
772 845	1416 1766	1667 1831	1569 1158	1923 2155	1190 1248	2441 2193	1114 1305	1247 1658	1514 1295	1573 1607	1922 2111	1123 1277	5762 3786	2820 2774	978 1110	1st half 2nd "	{ 78
071 066	109 149	131 187	114 088	133 163	103 091	281 311	089 100	111 151	065 080	117 134	119 124	161 134	525 400	252 208	093 141	1st half 2nd "	{ 79
554 499	850 1178	1585 1760	3370 2680	1163 1929	1243 1128	640 825	568 890	3381 3091	1350 1614	640 817	2172 1463	11217 5481	6414 7367	1558 2266	1st half 2nd "	{ 80	
167 137	274 186	229 130	153 180	108 065	143 160	017 003	155 143	167 141	193 185	145 101	157 166	044 102	336 547	-008 068	151 060	1st half 2nd "	{ 81
-468 -592	-502 -976	-309 -287	-671 -1935	-1322 -430	-2261 -2224	-316 -706	610 082	-407 -325	-420 -105	-420 -581	-672 -183	12345 16295	-1319 -1039	-100 -883	1st half 2nd "	{ 82	
-407 -465	507 -093	-109 -415	-044 412	-255 -351	275 259	-1599 -1626	029 -118	2410 2349	207 312	107 -173	312 501	-663 -415	9003 9897	-1720 -1343	-009 -883	1st half 2nd "	{ 83
-088 -103	514 029	1635 625	1550 .	4081 055	2765 -1820	1633 1454	-324 -901	" "	" "	-663 -608	-663 -415	-2108 -2384	2515 2515	1592 1592	1st half 2nd "	{ 84	
2022 1685	3286 2583	2793 1682	2904 2756	1620 1613	1862 2026	685 428	1881 1770	1732 1341	2580 2504	1615 1102	1691 1704	417 920	7286 9508	1003 711	1st half 2nd "	{ 85	
5950 6287	8501 6771	2365 1695	1550 2118	4081 2918	2765 3273	4961 3737	13657 12574	6001 6295	4153 3171	12115 8529	1807 2626	4880 9877	-421 -1247	1698 1698	1st half 2nd "	{ 86	

Analysis of working of each railway

NOTE.—Railways not shown

Serial number	PARTICULARS	Gauge	5' 6"										11 (a)
		Number	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)		
		Caledar year 1905 by half years	Bengal Central	Bengal Nagpur	Bom bay, Baroda and Central India	Ea-torn Bengal	East Indian	Great Indian Peninsula	Madras	Nizam's Gurran teed State	North West orn	Oudh and Rohil khand	Assam Bengal
	COACHING TRAFFIC—concl'd COST OF WORKING AND PROFITS— concl'd												
	Average profit on working a coaching unit one mile—												
87	Per passenger unit Pies { 1st half	1.27	1.66	1.30	1.13	1.72	1.05	1.27	1.50	1.27	1.16	0.33	
	2nd „		1.60	1.14	1.18	1.64	0.89	1.14	1.49	1.23	1.14	0.37	
88	Other traffic per ton „ { 1st half	1.25	29.35	16.63	4.80	25.08	20.36	22.01	29.15	28.96	31.20	2.62	
	2nd „		29.82	14.91	5.10	26.66	19.81	26.48	33.53	21.27	31.68	14.76	
	GOODS TRAFFIC GROSS RECEIPTS AND TRAIN MILEAGE— (In thousands)												
89	Receipts from goods traffic Rs { 1st half	1.47	82.63	79.26	18.68	2,77.95	2,61.57	64.47	17.44	2,34.02	39.88	6.46	
	2nd „		65.74	60.36	50.45	2,48.90	1,84.42	63.95	15.84	1,95.78	33.19	10.53	
90	Goods train miles run No { 1st half	70	1,833	703	371	4,748	1,428	1,541	3.35	4,984	1,028	413	
	2nd „		1,577	518	709	4,509	3,587	1,500	3.53	4,483	918	473	
91	Average goods receipts per train mile Rs { 1st half	2.10	4.85	11.28	5.03	5.85	5.91	4.18	5.21	4.70	3.68	1.56	
	2nd „		4.17	11.01	7.17	5.52	5.14	4.26	4.48	4.37	3.50	2.24	
	UNITS AND UNIT-MILEAGE (In thousands)												
92	Tons of goods carried one mile { 1st half	4,569	322,737	195,996	59,632	1,325,090	729,235	207,233	52,800	964,984	159,226	23,199	
	2nd „		253,473	156,532	129,962	1,182,625	535,513	197,615	49,722	8,0,631	128,976	37,510	
93	Average sum received for carrying a ton one mile Pies { 1st half	6.20	5.28	7.76	6.01	4.03	6.89	5.97	6.31	4.66	4.81	5.33	
	2nd „		4.88	7.40	7.51	4.04	6.61	6.15	6.12	4.87	1.01	5.42	
94	Average number of tons in a train Tons { 1st half	65.14	176.07	278.62	160.67	279.09	161.63	124.50	122.44	193.63	154.87	76.17	
	2nd „		103.88	285.45	163.36	261.9	119.28	132.99	110.30	191.81	1.6.05	79.44	
	VEHICLES AND VEHICLE MILEAGE—												
	Number of goods vehicles hauled one mile— (In thousands)												
95	Loaded Vehicle miles { 1st half	646	31,471	23,655	8,695	117,827	80,671	27,809	4,993	95,935	22,419	4,401	
	2nd „		21,801	16,118	14,096	103,713	64,580	27,105	4,652	85,177	20,982	4,301	
96	Empty . . . „ { 1st half	163	14,499	5,672	2,113	60,939	25,916	11,910	2,733	31,816	5,801	1,682	
	2nd „		12,528	3,677	5,535	57,033	18,291	11,482	2,477	25,411	6,124	2,585	
97	Brake vans „ { 1st half	57	3,836	641	388	4,738	8,184	2,493	580	5,097	922	388	
	2nd „		2,676	453	741	4,549	6,303	2,636	618	5,274	895	428	
98	Total „ { 1st half	836	19,926	9,201	11,221	183,404	114,771	42,912	8,297	132,848	29,162	6,471	
	2nd „		37,00	22,548	20,373	165,801	89,345	41,923	7,747	115,865	28,001	9,104	
	Average number of vehicles in a goods train—												
99	Freight vehicles No { 1st half	11.82	25.08	40.62	29.18	37.65	24.07	25.77	17.92	25.63	27.47	11.73	
	2nd „		21.77	40.29	27.70	35.65	23.00	25.72	15.82	21.67	28.60	19.01	
100	Brake vans „ { 1st half	0.81	1.83	0.92	1.05	1.00	1.85	1.63	1.32	1.02	0.59	0.94	
	2nd „		1.69	0.83	1.04	1.01	1.81	1.76	1.37	1.18	0.91	0.91	
101	Total . . . „ { 1st half	12.63	26.91	41.54	30.23	38.65	2.92	27.39	19.24	26.65	28.8	15.67	
	2nd „		23.46	41.12	28.74	36.66	24.90	27.48	17.19	25.85	29.54	19.92	
102	Average earnings per goods vehicle per mile (excluding brakes) Pies { 1st half	34.16	37.10	53.29	33.11	29.85	47.12	31.17	43.33	35.17	27.12	20.79	
	2nd „		36.77	52.15	49.73	29.74	42.74	31.82	42.66	33.09	33.51	22.64	
103	Carrying capacity hauled one mile (excluding brakes) Tons { 1st half	11,471	688,506	894,921	140,926	2,601,014	1,516,799	561,373	114,813	1,905,006	355,777	57.245	
	2nd „		503,396	298,269	261,663	2,847,659	1,181,819	549,311	106,032	1,680,471	347,658	85,233	
104	Percentage of freight upon capacity hauled Per cent { 1st half	39.83	46.88	49.63	42.31	50.95	18.08	35.92	45.98	50.61	41.76	10.53	
	2nd „		50.74	52.48	49.48	50.37	45.91	36.32	46.88	51.17	37.10	41.01	
105	Average load of a goods vehicle (including both loaded and empty) per mile Tons { 1st half	5.51	7.02	6.86	5.51	7.41	6.84	5.22	6.83	7.55	5.64	3.81	
	2nd „		7.53	7.08	6.62	7.36	6.46	5.17	6.97	7.78	4.76	4.18	
106	Average load of a loaded goods vehicle per mile „ { 1st half	7.07	10.25	8.64	6.87	11.25	9.04	7.45	10.45	10.06	7.10	5.27	
	2nd „		11.86	8.50	9.22	11.40	8.29	7.86	10.69	10.10	6.15	5.87	
	WEIGHT OF TRAIN AND TON-MILEAGE—												
	Gross ton mileage of all goods trains— (In thousands)												
107	Freight . . . Tons { 1st half	4,560	322,737	195,996	59,633	1,325,090	729,235	207,253	52,799	964,984	159,236	23,199	
	2nd „		253,473	156,532	129,962	1,182,625	535,513	199,515	49,722	850,481	128,976	37,510	
108	Dead weight . . . „ { 1st half	11,179	504,518	241,897	110,028	1,671,917	1,105,987	410,183	86,789	1,293,977	261,088	99,765	
	2nd „		390,188	187,888	204,658	1,617,715	926,036	401,370	84,237	1,139,414	255,716	62,200	
109	Total . . . „ { 1st half	15,748	827,255	437,893	169,661	2,997,007	1,695,223	617,735	133,538	2,258,061	429,24	62,964	
	2nd „		648,661	344,415	334,620	2,700,340	1,461,609	600,894	133,059	1,099,295	384,692	99,710	

DIX 18—continued

(by systems) during each half-year of 1905—contd

do not prepare these statistics

3' 3 ¹ /2"													2' 6'					Gauge
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c) (a) to (c)	18 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number	Serial number		
Bengal and North Western	Bhav nagar Gondal Juna gud Por bandar	Burma	Eastern Bengal	Hyder abad Goda vari Valley	Jodhpur Bikaner	Noor khali (Ben gal)	Rajputana Malwa	Rohilkund and Kunnaon	South Indian	South ern Mah ratta	Udaipur Chitor	Jubbulpore Gondha extension	Kalka Simla	Khushal garh Kohat Thal and Nowshera Durgal	Ranpur Dham tari	Calendar year 1905 by half years		
134 120	184 114	181 130	150 177	0 83 0 54	1 17 1 23	-0 25 -0 04	1 25 1 11	1 43 1 08	1 25 1 32	1 08 0 90	0 93 0 88	0 43 0 75	7 69 9 57	-0 16 6 27	2 14 1 64	1st half 2nd "	{ 87	
40 79 33 02	39 54 36 26	23 07 17 14	18 41 23 91	25 96 23 87	27 89 31 61		22 26 19 09	55 67 58 43	16 18 18 96	31 21 28 51	25 03 24 62	34 20 27 75	101 13 141 10	3 76 -35 20	43 90 21 19	1st half 2nd "	{ 88	
36,55 27,09	5,29 3,04	47,91 37,46	16,81 27,39	12,63 6,36	10,04 10,25	5 7	1,01,65 83,23	5,32 5,11	29,94 31,69	36,40 32,35	37 36	1,66 1,64	1,35 1,65	62 71	37 19	1st half 2nd "	{ 89	
1,168 918	129 92	1,456 1,378	485 587	551 206	279 277	4 5	2,207 1,844	182 168	1,021 1,175	1,346 1,262	8 8	79 83	53 46	70 106	19 17	1st half 2nd "	{ 90	
3 13 2 86	4 11 3 31	3 29 2 72	3 47 4 67	3 66 3 08	3 59 3 70	1 12 1 25	4 61 4 51	2 92 3 05	2 93 2 70	2 71 2 56	4 47 4 22	2 09 1 98	2 57 3 57	0 88 0 67	1 93 1 16	1st half 2nd "	{ 91	
130,129 94,176	10,119 6,652	121,921 103,740	50,519 69,554	26,761 13,361	27,872 27,905	127 183	319,766 252,603	17,158 14,339	81,053 89,574	104,168 95,783	403 402	5,182 6,870	572 842	2,593 1,457	908 672	1st half 2nd "	{ 93	
5 39 5 52	10 04 8 78	7 59 6 93	6 39 7 55	9 21 9 14	6 92 7 05	7 28 7 06	6 10 6 33	5 95 6 83	7 09 6 79	6 71 6 48	17 74 16 97	6 14 4 57	45 31 37 52	4 56 9 14	6 83 5 49	1st half 2nd "	{ 93	
111 39 99 33	73 64 72 40	83 27 75 91	104 24 118 57	50 11 34 77	99 76 100 61	28 88 33 92	144 92 136 97	94 20 85 56	79 36 76 24	77 41 75 87	48 39 45 47	65 35 83 16	10 87 18 25	37 19 14 00	47 51 40 61	1st half 2nd "	{ 94	
23,419 17,603	2,419 1,608	25,346 22,755	10,769 14,931	4,441 2,741	4,099 1,622	41 52	52,611 42,546	2,452 2,411	16,421 17,781	23,911 21,687	118 116	1,103 1,990	196 232	536 733	203 111	1st half 2nd "	{ 95	
9,582 7,821	1,234 902	11,271 8,715	2,075 2,422	2,050 1,023	1,688 1,923	14 17	20,681 12,911	1,306 1,201	5,350 6,854	5,942 5,615	6 71	436 133	94 79	171 280	123 46	1st half 2nd "	{ 96	
1,030 1,393	153 82	2,002 2,017	501 590	805 511	92 103	7 10	2,309 1,773	251 252	902 1,233	1,841 1,713	31 38			61 108	29 28	1st half 2nd ",	{ 97	
34,631 27,022	3,796 2,592	38,619 33,487	13,315 17,033	7,326 4,75	6,779 6,648	62 79	75,604 57,233	4,009 3,804	22,682 20,868	31,691 29,045	183 187	1,570 1,470	290 311	768 1,121	355 180	1st half 2nd "	{ 98	
28 25 27 02	28 32 27 31	25 15 22 85	26 51 28 05	12 21 9 79	23 93 23 60	12 74 12 95	3 22 30 07	20 63 21 55	21 33 20 97	22 18 21 65	21 97 22 27	19 11 17 31	5 51 6 71	10 14 9 47	17 10 9 47	1st half 2nd "	{ 99	
1 40 1 47	1 18 0 90	1 38 1 46	1 03 0 99	1 51 1 33	0 33 0 37	1 60 1 74	1 04 0 96	1 38 1 50	0 88 1 05	1 37 1 36		0 39 0 46		0 68 1 01	1 50 1 41	1st half 2nd "	{ 100	
29 65 28 19	29 50 28 21	26 53 21 81	27 54 29 01	13 72 11 12	24 26 23 97	14 43 14 69	34 26 31 03	22 01 23 05	22 21 22 02	23 55 23 01	21 97 22 27	19 80 17 77	5 51 6 74	11 02 10 55	18 60 10 88	1st half 2nd "	{ 101	
21 26 20 30	27 87 23 26	25 13 22 66	25 83 31 97	37 78 33 15	28 83 30 07	16 90 18 49	26 63 28 81	27 17 27 14	26 10 24 70	23 41 22 73	30 08 36 46	20 67 22 00	59 35 101 61	16 74 13 41	21 11 23 57	1st half 2nd "	{ 102	
321 068 252,110	23 754 18,493	288,207 2,0231	100,019 116,394	69,777 39,441	60,300 59,748	527 672	611,773 490,218	40,084 39,595	157,545 181,482	213,047 199,703	1,538 1,539	9,601 9,171	1,780 2,100	3,158 4,530	1,745 1,140	1st half 2nd "	{ 103	
40 06 37 35	39 25 35 97	12 06 41 16	46 33 17 79	38 33 53 83	46 22 46 70	21 05 27 16	49 83 51 53	42 81 36 23	51 45 49 36	48 89 47 96	26 12 26 11	53 87 75 00	32 13 75 00	82 10 40 08	52 04 32 83	58 95	1st half 2nd "	{ 104
3 94 3 68	2 78 2 65	3 31 3 30	3 93 4 23	1 10 3 55	4 17 4 26	2 32 2 62	1 36 4 55	4 57 8 97	3 72 3 61	3 49 3 50	2 20 2 15	3 37 4 80	1 97 2 71	3 67 2 78	1 47 1 29	1st half 2nd "	{ 105	
5 56 5 29	4 18 4 14	4 78 4 55	1 69 4 96	6 03 4 87	5 58 6 81	3 11 3 10	7 00 5 95	4 94 5 04	4 36 4 42	3 40 3 48	4 70 6 89	2 92 3 64	4 84 3 64	4 47 2 03	6 05	1st half 2nd "	{ 106	
130,129 94,176	10,119 6,652	121,921 103,740	50,519 69,554	26,765 13,361	27,873 27,905	127 183	319,766 252,603	17,159 14,340	81,053 89,574	104,168 95,783	403 402	5,181 6,870	572 812	2,593 1,487	908 673	1st half 2nd "	{ 107	
171,509 137,008	17,539 12,116	216,508 195,777	76,061 98,569	45,181 26,050	36,218 35,970	358 501	339,138 267,343	19,707 19,094	130,690 151,041	167,944 155,046	1,037 1,060	9,011 8,451	2,705 2,713	3,104 4,622	1,245 855	1st half 2nd "	{ 108	
304,638 232,081	27,638 18,798	337,732 299,517	126,590 168,123	71,946 39,411	64,091 63,875	485 634	658,904 519,946	36,866 33,434	211,743 240,615	272,112 250,829	1,440 1,462	14,192 15,330	3,367 3,585	5,697 6,109	2,153 1,527	1st half 2nd "	{ 109	

Analysis of working of each railway

NOTE—Railways not shown

Serial number	PARTICULARS	GAUGE.												11 (a)
		5' 6"												
		Number		1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)		
	Calen dar year 1905 by half- years		Bengal Central	Bengal Nagpur	Bombay, Baroda and Central India	Eastern Bengal	East Indian	Great Indian Peninsula	Madras	Nizam's Guan tee State	North West ern	Oudh and Rohil khand	Assam Bengal	
GOODS TRAFFIC—concl'd														
WEIGHT OF TRAIN AND TON MILEAGE—concl'd														
Average weight of a goods train—														
110	Freight	Tons	{ 1st half 2nd "	65 14 163 89	176 07 285 45	278 82 183 86	160 67 262 29	279 09 149 28	164 68 132 99	134 50 110 30	122 44 193 63 191 81	151 87 136 08	56 17 79 44	
111	Dead weight	"	{ 1st half 2nd "	159 39 247 40	275 24 342 62	344 12 298 75	296 44 336 61	352 13 258 16	263 30 267 55	266 38 186 87	201 15 259 64 254 17	258 85 269 80	96 23 131 73	
112	Total	,	{ 1st half 2nd "	224 53 411 29	451 31 628 07	622 94 472 11	457 11 598 90	631 22 407 14	427 98 400 54	400 88 297 17	323 59 453 27 445 98	411 72 405 33	152 45 211 17	
COST OF WORKING AND PROFIT														
113	Average cost of hauling a goods train one mile	Rs	{ 1st half 2nd "	2 12 2 07	2 15 4 51	3 99 3 09	3 37 2 10	2 12 2 53	2 37 2 70	2 65 1 52	2 29 1 52	2 21 2 34	2 14 2 02	
114	Average cost of hauling a goods vehicle with its load one mile	Pies	{ 1st half 2nd "	34 49 18 27	16 44 21 47	18 86 21 39	22 20 11 30	10 81 21 02	18 91 20 17	19 74 14 46	13 59 17 16 18 23	15 46 14 22	27 96 20 37	
115	Average cost of hauling a goods unit (viz., one ton) one mile	"	{ 1st half 2nd "	6 26 2 43	2 34 3 03	2 75 3 23	4 03 1 54	1 46 3 25	2 76 3 90	3 78 2 07	1 99 2 27 2 35	2 74 2 99	7 33 4 87	
115	A	Average cost of hauling a goods unit one mile, includ ing interest on capital ex pended on open line at the rate of 5 per cent per annum	"	10 11 5 76	5 15 5 76	5 16 5 72	7 48 3 06	2 87 5 90	4 93 7 32	7 09 5 33	5 08 4 59	5 27 5 93	15 53 11 04	
116	Average profit on working a goods train one mile	Rs	{ 1st half 2nd "	-0 02 2 10	2 70 6 50	7 29 4 08	1 66 3 42	3 73 2 61	3 54 1 56	1 53 1 56	3 57 2 96	2 41 2 03	1 67 1 38	-0 58 0 22
117	Average profit on working a goods vehicle with its load one mile	Pies	{ 1st half 2nd "	-0 33 18 50	20 66 30 98	34 49 28 34	10 91 18 44	19 04 21 72	28 21 21 72	11 43 11 65	29 71 28 20	18 01 15 76	11 66 9 29	-7 57 -2 27
11	Average profit on working a goods unit (viz., one ton) one mile	"	{ 1st half 2nd "	-0 06 2 45	2 94 3 37	5 01 4 28	1 98 2 50	2 57 3 36	4 13 2 25	2 19 4 03	1 25 2 39	2 39 2 02	2 07 1 95	-1 08 0 55
DETAILED PERCENTAGES OF EARN INGS AND EXPENDITURE														
Percentage on Total Earnings—														
119	Coaching traffic	Percent	{ 1st half 2nd "	63 27 34 85	28 07 37 12	31 63 30 56	44 92 29 16	29 16 32 80	21 26 35 11	36 35 22 35	28 65 24 62	43 72 34 23	52 31 36 60	
120	Goods traffic	,	{ 1st half 2nd "	22 13 60 89	68 02 66 90	66 24 66 39	45 11 65 80	69 30 66 19	74 74 62 41	60 66 73 63	73 63 70 20	69 74 64 54	45 72 44 18	42 56 55 82
121	Sundries, including tele graph	"	{ 1st half 2nd "	14 60 3 93	3 65 1 98	2 13 3 05	9 97 1 27	1 27 1 01	1 00 2 48	2 79 5 18	4 02 5 18	1 61 1 23	7 56 7 60	4 45 7 01
122	Steam boat earnings	"	{ 1st half 2nd "		0 26 0 33			0 27 0 39						0 68 0 57
	Total	"	{ 1st half 2nd "	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	
Percentage of Working Expenses on Total Earnings—														
123	Maintenance	Percent	{ 1st half 2nd "	22 03 9 42	11 60 9 29	7 46 9 25	18 72 8 30	8 30 6 92	8 86 10 35	12 57 15 14	7 47 8 88	13 57 12 72	21 47 19 10	37 17 28 14
124	Locomotive expenses	,	{ 1st half 2nd "	15 14 14 01	11 63 18 26	16 26 15 70	13 26 10 29	10 22 22 25	18 92 23 06	23 06 19 81	10 31 10 17	20 73 23 13	16 25 17 49	27 18 19 56
125	Carrige and wagon ex penses	"	{ 1st half 2nd "	3 01 4 24	3 36 5 17	5 19 4 29	7 30 5 89	2 89 5 71	4 21 8 45	6 81 2 97	3 12 3 25	3 25 3 59	3 07 3 35	8 22 5 83
126	Traffic expenses	,	{ 1st half 2nd "	11 63 8 9	7 15 6 99	6 18 12 17	15 80 7 93	7 47 8 77	6 63 7 41	7 20 5 19	5 45 5 71	6 88 8 13	10 19 11 72	13 76 12 92
127	General charges	"	{ 1st half 2nd "	16 91 6 03	4 84 4 19	3 63 3 87	6 10 3 59	3 18 4 14	3 31 5 19	4 56 5 45	4 99 5 45	2 79 1 71	4 31 1 29	17 91 14 06
128	Miscellaneous expenses	"	{ 1st half 2nd "	7 48 3 03	3 53 2 50	1 17 4 48	2 39 1 88	2 65 2 44	1 99 3 51	3 65 1 71	1 74 1 71	1 29 1 37	2 19 3 46	5 58 5 24
129	Steam boat expenses	"	{ 1st half 2nd "		0 62 1 83			0 25 0 46				-0 01 0 01	1 59 0 53	
130	TOTAL WORKING EXPENSES	"	{ 1st half 2nd "	76 20 46 65	42 78 46 38	39 89 49 76	63 57 36 96	34 95 53 66	44 15 59 51	57 85 59 51	33 08 34 92	48 50 51 98	57 51 59 77	111 41 81 28

DIX 18—continued.

(by systems) during each half-year of 1905—contd.

do not prepare these statistics

3 3 ^{1/2} "												2' 6"				GAUGE	Serial number of
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (e)	11 (b)	12 (g) to (m)	20(a) & (b)	21 (a) to (f)	22 (e) to (j)	23 (a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number	
Bengal and North West Orissa	Bha- nagar Gondal Juna gad Por- bandar	Burma	Eastern Bengal	Hydera- bad Go- davari Valley	Jodh pur Bikaner	Nan- khali (Bengal)	Raj- putana Malwa	Rohil- kund and Kumaon	South Indian	South- ern Mah- ratta	Udaipur Chitor	Jubbul pore Gondia exten- sion	Kalka Simla	Khushal- garh Kohat Thal and Nowshera Durgai	Raipur Dham- tari	Calendar year 1905 by half years	
111 39 99 32	78 61 72 40	83 27 75 30	104 24 118 57	50 11 31 77	99 76 100 61	29 58 33 92	144 92 136 97	94 20 85 55	79 36 76 24	77 41 75 87	48 39 47 85	65 35 63 16	10 87 18 25	37 19 14 00	47 51 40 64	1st half 2nd ,,	
149 33 145 44	126 30 132 20	148 72 142 12	156 94 168 04	81 60 67 80	129 61 129 63	83 49 93 14	153 69 144 96	108 20 113 93	127 96 128 56	124 81 122 81	124 53 126 11	113 64 102 18	53 15 59 45	44 51 43 51	65 15 51 73	1st half 2nd ,,	
260 77 244 76	214 94 204 60	231 99 217 42	261 18 286 61	134 71 102 57	229 49 230 29	113 07 127 06	208 61 281 93	202 40 199 48	207 32 204 80	202 22 193 68	172 97 173 96	178 99 185 34	61 02 77 70	81 79 57 51	112 66 92 37	1st half 2nd ,,	
1 22 1 21	1 99 2 33	2 01 2 07	2 46 1 93	1 57 1 80	1 41 1 52	1 22 1 49	1 81 2 01	1 47 1 89	1 76 1 49	1 73 1 68	1 62 1 60	1 48 1 74	2 09 1 71	1 82 1 24	1 13 1 23	1st half 2nd ,,	
8 27 8 80	13 53 16 33	15 33 17 41	17 83 13 19	16 19 18 97	11 53 12 33	19 93 22 10	10 62 13 02	13 69 16 83	15 86 13 67	14 95 11 66	14 16 15 57	11 62 19 37	72 75 48 61	34 50 24 90	12 74 20 03	1st half 2nd ,,	
2 10 2 39	4 87 6 16	4 63 5 29	4 53 3 12	3 91 5 31	2 77 2 89	8 58 8 43	2 43 2 86	3 00 4 24	4 26 3 76	4 29 4 24	6 43 7 25	4 34 4 03	36 89 17 95	9 40 16 97	4 59 5 83	1st half 2nd ,,	
4 59 5 36	10 37 12 73	8 01 9 10	8 64 6 28	7 06 10 34	4 99 4 95	16 57 16 57	4 06 4 69	5 42 7 00	7 54 6 64	8 44 8 92	31 07 31 92	10 95 9 57	118 86 73 31	18 49 32 55	10 08 12 48	1st half 2nd ,,	
1 91 1 62	2 12 0 99	1 28 0 65	1 01 2 74	2 09 1 28	2 15 2 18	-0 20 -0 21	2 77 2 47	1 45 1 16	1 17 1 21	0 98 0 88	2 85 2 42	0 61 0 24	0 48 1 86	-0 94 -0 57	0 80 -0 07	1st half 2nd ,,	
12 99 11 50	11 31 6 93	9 79 5 45	7 30 19 78	21 59 13 48	17 80 17 71	-3 03 -3 61	16 01 15 79	18 48 10 29	10 54 11 03	8 46 7 87	24 92 20 69	6 02 2 63	16 60 53 00	-17 76 -11 49	8 37 -1 46	1st half 2nd ,,	
3 29 3 13	5 17 2 62	2 96 1 64	1 86 4 43	5 27 3 80	4 15 4 16	-1 30 -1 37	3 67 3 47	2 95 2 59	2 83 3 03	2 42 2 24	11 31 9 72	1 80 0 51	8 42 19 67	-4 84 -7 83	2 24 -0 31	1st half 2nd ,,	
41 97 49 01	55 21 66 23	43 93 44 31	46 44 39 46	26 88 41 03	37 76 41 74	55 29 71 77	28 59 36 51	42 04 44 49	58 27 53 24	37 06 39 23	59 90 66 23	2 26 39 92	57 13 55 61	57 88 59 73	39 15 50 51	1st half 2nd ,,	
49 62 42 06	42 53 31 77	54 32 53 86	45 41 53 84	70 68 55 19	59 72 55 65	13 53 20 36	69 58 61 23	52 86 51 99	42 29 45 13	61 35 59 90	37 90 32 40	71 95 58 69	10 81 39 01	40 91 39 21	57 92 44 09	1st half 2nd ,,	
1 52 2 66	2 26 2 70	1 10 1 50	1 04 1 78	2 44 3 12	2 52 2 61	1 18 1 87	1 83 2 21	0 44 3 53	1 44 1 63	1 59 1 87	2 20 0 53	1 79 1 39	1 76 2 38	1 21 1 06	2 93 5 40	1st half 2nd ,,	
6 29 6 27		0 35 0 33	7 11 8 92					4 66			0 84					1st half 2nd ,,	
100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	100 00 100 00	1st half 2nd ,,		
10 21 13 38	11 70 17 51	16 79 19 23	18 99 10 82	21 59 24 58	12 87 12 74		7 46 9 29	8 25 10 20	12 54 12 00	16 33 16 61	12 01 20 44	16 12 22 63	-4 30 -1 35	58 61 44 61	14 68 28 22	1st half 2nd ,,	
10 61 10 51	10 85 13 08	18 33 25 35	16 19 9 53	11 10 15 52	15 22 16 07		16 26 18 25	13 45 11 76	19 26 15 13	20 35 22 39	16 66 13 70	2 25 21 50	29 32 18 87	38 59 41 12	16 44 19 78	1st half 2nd ,,	
2 63 3 02	2 69 5 51	3 66 5 34	1 76 2 58	1 49 2 15	2 52 2 33		5 19 5 15	4 37 3 47	4 01 4 42	5 42 5 18	2 16 2 36	4 54 8 27	3 10 2 88	10 77 7 13	2 03 4 66	1st half 2nd ,,	
7 40 8 62	7 37 8 78	7 98 10 11	9 97 8 87	6 51 9 96	5 74 5 50		6 19 6 99	7 92 7 91	7 33 7 71	7 82 8 60	8 51 7 86	12 51 11 14	10 13 8 01	22 24 21 83	6 32 7 79	1st half 2nd ,,	
4 67 5 73	8 25 10 52	5 66 6 93	5 78 3 82	7 08 11 61	3 71 3 41		3 63 4 10	7 56 7 64	6 14 6 57	7 51 8 16	6 75 6 25	12 62 12 63	10 71 10 76	14 16 13 18	4 58 10 25	1st half 2nd ,,	
0 72 0 99	1 50 1 24	1 17 1 23	1 71 1 64	0 68 1 97	2 30 2 20		1 60 1 68	1 75 1 63	1 36 1 54	1 56 1 60	1 68 1 76	1 00 1 26	2 41 1 34	2 54 2 70	0 59 0 04	1st half 2nd ,,	
3 53 3 91		0 85 0 96	6 87 5 28											3 38 3 58		1st half 2nd ,,	
39 82 46 16	42 36 56 61	51 09 69 35	61 27 42 04	48 45 65 79	42 39 42 25	102 17	40 33 45 73	44 80 42 64	50 61 47 37	58 99 62 54	47 77 52 37	72 04 77 43	59 97 36 85	150 29 71 64	46 69 13 10	1st half 2nd ,,	

Analysis of working of each railway

NOTE.—Railways not shown

Serial number	PARTICULARS	GAUGE Number	5' 6"											
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (c) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a)		
			Bengal Central	Bengal Nagpur	Bom bay, Baroda and Central India	Eastern Bengal	East Indian	Great Indian Peninsula	Madras	Nizam's Gurarnted State	North Western	Oudh and Rohil Khind	Assam-Bengal	
		Calen dar year 1905 by half years												
	PER MILE OF LINE MAIN TAINED													
131a	General superintendence (including office expenses) Rs	{ 1st half 2nd "	186.85	187.56 153.40	181.73 175.70	337.23 257.42	212.51 228.39	145.38 142.09	184.12 164.06	178.05 129.33	139.14 145.08	130.46 135.28	147.80 133.75	
132a	Maintenance and renewal of permanent way	{ 1st half 2nd "	804.78	315.70 263.36	603.36 567.35	1,676.73 707.99	781.60 266.34	616.50 401.86	441.20 532.75	237.62 271.12	603.98 371.48	719.12 540.55	363.41 294.17	
133a	Repairs of bridges, &c	{ 1st half 2nd "	15.60	297.56 16.43	105.75 161.52	290.89 188.72	160.70 163.91	179.70 220.44	93.99 104.97	41.00 64.05	77.70 62.56	176.59 168.69	116.21 77.12	
134a	Conservancy of rivers	{ 1st half 2nd "				0.17					0.13 0.09	15.56 37.64	3.46 3.74	
135a	Repairs of stations and buildings	{ 1st half 2nd "	76.75	48.77 73.37	139.13 107.70	363.57 278.41	237.33 314.35	191.00 118.58	83.21 102.49	125.63 88.97	177.00 155.85	210.86 171.01	62.40 38.52	
136a	Other charges (net)	{ 1st half 2nd "	C5.52	25.33 66.95	17.06 96.55	154.75 96.76	166.52 197.74	81.49 83.03	19.93 26.88	76.58 63.07	162.96 241.37	121.55 120.45	67.13 39.45	
137a	Total maintenance, &c.	{ 1st half 2nd "	1,149.50	851.12 576.1	1,077.33 1,111.91	2,813.17 1,527.47	1,502.66 1,172.76	1,151.16 1,029.00	94.85 105.15	501.16 371.65	1,196.34 1,014.00	1,295.74 1,137.72	762.08 592.81	
	PER MILE OF TRACK, INCLUDING SIDINGS					*								
131b	General superintendence (including office expenses) Rs	{ 1st half 2nd "	157.10	119.03 130.81	122.19 117.65	108.51 158.06	133.35 115.35	101.00 101.02	172.38 135.76	122.50 115.00	109.73 113.60	115.90 117.84	131.65 127.77	
132b	Maintenance and renewal of permanent way	{ 1st half 2nd "	677.94	295.89 228.90	10.68 37.90	863.55 431.71	439.71 169.50	441.49 340.32	267.63 410.85	210.61 213.74	473.42 220.85	654.26 470.65	328.21 261.43	
133b	Repairs of bridges, &c	{ 1st half 2nd "	13.14	2.7.6 14.01	71.10 110.16	149.81 115.88	6.0.01 105.60	123.67 161.80	77.70 86.37	39.13 56.98	61.16 49.00	151.17 147.11	103.52 68.54	
134b	Conservancy of rivers	{ 1st half 2nd "				0.11				0.12 0.07	12.25 29.47	3.62 3.09		
135b	Repairs of stations and buildings	{ 1st half 2nd "	61.66	41.87 62.55	93.75 72.17	187.25 169.73	119.88 200.05	97.70 66.81	65.87 61.81	25.50 34.65	129.12 122.02	184.48 118.96	55.69 34.03	
136b	Other charges (net)	{ 1st half 2nd "	55.19	21.93 57.09	31.64 61.65	79.70 59.41	106.05 125.83	8.35 60.79	123.59 105.24	56.92 57.85	141.01 185.97	108.73 104.83	59.73 35.68	
137b	Total maintenance, &c	{ 1st half 2nd "	908.83	739.33 193.42	721.76 714.3	1,418.81 937.93	97.03 716.43	8.6.30 753.73	70.26 91.53	418.67 503.29	941.69 503.91	1,216.16 1,092.78	678.66 526.85	
	PER TOTAL TRAIN MILE													
131c	General superintendence (including office expenses) Rs	{ 1st half 2nd "	1.94	1.37 1.69	1.34 1.39	1.46 1.20	0.93 1.00	0.79 0.83	1.58 1.21	1.62 1.46	0.97 1.02	1.06 1.09	2.55 2.26	
132c	Maintenance and renewal of permanent way	{ 1st half 2nd "	6.35	3.13 2.60	1.46 1.50	7.46 3.00	3.12 1.17	3.34 2.67	3.82 3.93	2.79 3.09	4.19 2.62	6.10 4.35	6.37 4.64	
133c	Repairs of bridges, &c	{ 1st half 2nd "	0.16	2.95 0.17	0.73 1.1	1.29 0.88	0.45 0.73	0.98 1.36	0.51 0.77	0.32 0.72	0.54 0.44	1.11 1.06	2.01 1.23	
134c	Conservancy of rivers	{ 1st half 2nd "									0.11 0.27	0.03 0.03		
135c	Repairs of stations and buildings	{ 1st half 2nd "	0.80	0.48 0.77	1.07 0.86	1.62 1.29	1.03 1.18	0.71 0.73	0.71 0.76	0.24 0.44	1.23 1.10	1.72 1.38	1.08 0.61	
136c	Other charges (net)	{ 1st half 2nd "	0.68	0.24 0.69	0.35 0.76	0.60 0.15	0.72 0.87	0.41 0.52	1.28 1.48	0.67 0.71	1.57 1.71	1.01 0.97	1.16 0.63	
137c	Total maintenance, &c	{ 1st half 2nd "	11.93	8.47 6.63	7.96 8.82	12.53 7.12	6.75 5.15	6.28 6.36	8.20 6.15	5.94 6.45	8.31 7.16	11.36 9.19	13.17 9.35	
	PER 1,000 GROSS TON MILES													
131d	General superintendence (including office expenses) Rs	{ 1st half 2nd "	0.55	0.23 0.30	0.21 0.23	0.28 0.28	0.12 0.13	0.11 0.17	0.29 0.27	0.27 0.35	0.17 0.19	0.21 0.23	0.96 0.71	
132d	Maintenance and renewal of permanent way	{ 1st half 2nd "	2.97	0.56 0.52	0.70 0.76	1.42 0.81	0.43 0.16	0.61 0.55	0.70 0.86	0.15 0.54	0.71 0.48	1.22 0.90	2.40 1.46	
133d	Repairs of bridges, &c	{ 1st half 2nd "	0.04	0.48 0.03	0.12 0.22	0.25 0.22	0.06 0.10	0.08 0.26	0.15 0.17	0.09 0.13	0.09 0.09	0.09 0.08	0.75 0.58	
134d	Conservancy of rivers	{ 1st half 2nd "									0.02 0.05	0.01 0.01		
135d	Repairs of stations and buildings	{ 1st half 2nd "	0.23	0.09 0.14	0.16 0.14	0.31 0.31	0.13 0.10	0.19 0.14	0.18 0.17	0.06 0.08	0.22 0.20	0.34 0.28	0.41 0.19	
136d	Other charges (net)	{ 1st half 2nd "	0.19	0.04 0.13	0.06 0.13	0.13 0.11	0.09 0.11	0.09 0.10	0.24 0.32	0.11 0.13	0.22 0.33	0.20 0.20	0.44 0.20	
137d	Total maintenance, &c	{ 1st half 2nd "	3.38	1.88 1.12	1.25 1.48	2.39 1.73	0.83 0.69	1.14 1.22	1.51 1.70	0.97 1.13	1.46 1.32	2.26 1.90	4.96 2.94	

DIX 18—continued

(by systems) during each half-year of 1905—contd

do not prepare these statistics

3' 3 ³ /8"														2' 6"				Gauge
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	11 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 'a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number	Serial number	
Bengal and North Western	Bhuvnagar-Gondal-Junnagad Porbandar	Burma	Eastern Bengal	Hyderabad Godavari Valley	Jodhpur Bihanor	Noa lhal (Bengal)	Rajputana Malwa	Rohilkund and Kumaon	South Indian	Southern Maharrata	Udaipur Chitor	Jubbulpore Gondwana extension	Kalka Simla	Khushalgarh Kohat Thal and Nowshera Durgai	Raipur Dharmtari	Calendar year 1905 by half years		
86 69 91 68	86 08 49 72	128 17 136 21	115 66 118 45	116 90 111 45	19 33 18 34		92 88 96 51	65 79 73 83	150 92 162 11	82 00 80 87	38 84 30 00	76 60 56 52	239 33 161 06	186 40 169 51	6 09 6 24	1st half 2nd "	{ 131a	
232 32 254 84	109 54 241 49	585 12 440 63	337 77 275 23	777 86 406 80	171 31 239 68		308 40 269 30	148 78 190 61	446 36 281 06	344 27 281 83	116 59 273 07	86 93 45 82	59 51	232 36 157 06	131 93 116 16	1st half 2nd "	{ 132a	
67 70 83 84	6 80 27 32	138 47 211 97	282 91 158 10	22 36 63 64	4 56 6 13		54 03 50 37	37 56 47 00	44 87 116 51	51 72 51 61	0 37 0 47	14 63	2 93	100 14 155 42	8 63 4 32	1st half 2nd "	{ 133a	
0 40 0 47	— 0 06 0 18	0 57					6 25 — 3 01							1 67		1st half 2nd "	{ 134a	
45 32 50 89	15 41 33 11	115 29 83 67	107 89 92 27	42 78 43 60	17 06 10 49		71 27 59 21	23 99 44 82	88 40 55 35	48 85 66 99	7 50 10 37	116 70	1 68	148 10 52 61	18 71 43 96	1st half 2nd "	{ 135a	
50 45 49 39	18 16 32 09	112 67 125 63	100 57 58 95	42 53 91 61	47 54 6 97		23 06 72 31	13 31 35 46	— 24 57 4 75	45 07 49 41	11 90 10 40	3 93 43 91	1 33	50 05 45 58	1 23 48 06	1st half 2nd "	{ 136a	
482 89 530 60	325 99 384 03	1 079 66 695 29	941 63 698 57	1,001 93 720 00	2 9 85 261 61		550 66 607 70	295 63 388 71	655 98 622 71	581 91 530 71	17 20 333 91	167 1 277 08	239 33 — 90 21	668 72 610 18	166 61 218 74	1st half 2nd "	{ 137a	
74 05 79 31	78 36 45 20	110 03 116 31	98 07 96 45	105 16 100 28	18 43 17 42		79 21 82 38	58 27 65 58	133 82 143 28	73 80 72 94	36 43 36 59	71 03 52 52	216 60 — 140 50	124 11 154 10	5 73 5 87	1st half 2nd "	{ 131b	
200 85 220 46	181 64 219 51	502 54 376 25	280 42 44 00	609 26 366 02	163 10 227 77		262 98 246 93	191 74 168 79	395 78 249 88	318 81 254 17	109 37 26 11	80 61 42 12	211 43 53 93	121 04 170 04	103 21	1st half 2nd "	{ 132b	
55 33 72 53	6 19 24 63	118 93 181 00	230 92 134 42	10 10 57 26	4 34 5 62		46 10 77 13	33 26 41 61	39 70 101 84	46 54 46 54	0 24 0 45	13 59	2 65	* 1 12 141 28	8 11 4 06	1st half 2nd "	{ 133b	
0 34 0 41	— 0 05 0 16	0 43					5 53 — 2 66							1 52		1st half 2nd "	{ 134b	
39 18 43 58	14 03 30 37	99 02 71 44	91 49 78 45	36 49 83 41	16 24 9 98		60 76 50 54	21 24 39 68	34 05 45 96	43 96 60 42	7 03 9 43	108 44	1 52	134 77 47 82	17 59 41 32	1st half 2nd "	{ 135b	
43 63 43 73	16 33 28 18	97 76 107 27	25 28 50 13	38 26 65 29	15 23 6 63		20 50 61 72	11 70 31 43	— 21 70 4 19	40 56 44 56	11 16 9 76	3 69 40 86	1 21	45 54 41 43	1 20 45 19	1st half 2nd "	{ 136b	
417 49 459 02	296 75 348 12	927 28 852 43	861 18 503 30	901 46 648 26	247 41 267 63		469 55 518 69	261 83 344 40	581 5 50 5	523 7 478 63	164 31 312 63	155 33 257 47	216 60 — 87 19	608 49 554 07	1 6 67 205 6	1st half 2nd "	{ 137b	
0 89 1 00	2 12 1 23	1 13 1 24	1 26 1 16	1 36 1 72	0 49 0 44	Included with the Assam Bengal	0 77 0 87	0 89 0 97	1 48 1 46	1 03 1 02	1 61 1 53	2 44 1 66	2 69 — 1 93	2 14 1 96	0 17 0 18	1st half 2nd "	{ 131c	
2 38 2 77	4 91 6 9	5 17 4 01	3 67 2 83	9 06 6 28	4 83 5 80		2 55 2 60	2 00 2 51	4 37 3 54	4 46 3 55	4 81 10 67	2 77 1 53	0 71	3 64 2 17	3 86 3 34	1st half 2nd "	{ 132c	
0 09 0 91	0 17 0 73	1 22 1 92	3 07 1 62	0 26 0 93	0 12 0 15		0 45 0 81	0 51 0 62	0 44 1 07	0 65 0 65	0 01 0 01	0 43 0 43	0 04	1 57 1 80	0 25 0 12	1st half 2nd "	{ 133c	
0 01		0 01					— 0 08 — 0 04								0 03		1st half 2nd "	{ 134c
0 17 0 55	0 56 0 88	1 02 0 70	1 17 0 95	0 50 0 67	0 43 0 25		0 58 0 53	0 32 0 59	0 37 0 84	0 61 0 40	0 31 3 43	0 02		2 72 0 61	0 55 1 26	1st half 2nd "	{ 135c	
0 50 0 54	0 45 0 84	1 00 1 14	1 00 0 00	0 50 1 47	1 20 0 17		0 19 0 66	0 17 0 46	— 0 21 0 03	0 7 0 62	0 49 0 41	0 13 1 29	0 01	0 78 0 53	0 04 1 38	1st half 2nd "	{ 136c	
4 94 5 77	8 13 10 16	9 51 9 07	10 26 7 17	11 68 11 12	6 62 6 81		1 54 5 47	3 97 5 11	6 42 5 60	7 32 6 68	7 26 13 02	5 31 8 14	2 69 — 1 15	10 48 7 07	4 87 6 28	1st half 2nd "	{ 137c	
0 25 0 30	0 72 0 17	0 33 0 37	0 41 0 34	0 42 0 57	0 16 0 13		0 20 0 23	0 31 0 32	0 50 0 49	0 34 0 35	0 04 0 48	0 86 0 57	2 41 — 1 47	1 83 2 06	0 12 0 16	1st half 2nd "	{ 131d	
0 66 0 82	1 66 2 33	1 48 1 21	1 20 0 82	2 78 2 10	1 29 1 74		0 66 0 72	0 70 0 85	1 47 1 22	1 48 3 42	1 64 0 46	0 97 0 54	3 12 2 27	2 56 2 85	1st half 2nd "	{ 132d		
0 19 0 27	0 06 0 26	0 31 0 58	1 00 0 47	0 08 0 35	0 03 0 03		0 11 0 23	0 17 0 21	0 15 0 36	0 22 0 22		0 14	0 03	1 34 1 80	0 17 0 10	1st half 2nd "	{ 133d	
		0 01					— 0 03 — 0 02								0 02		1st half 2nd "	{ 134d
0 13 0 16	0 13 0 23	0 29 0 28	0 38 0 22	0 15 0 08	0 13 0 03		0 16 0 15	0 11 0 20	0 13 0 17	0 20 0 29	0 10 0 13	0 10 1 17	0 02	1 09 0 64	0 36 1 07	1st half 2nd "	{ 135d	
0 14 0 16	0 15 0 34	0 29 0 17	0 36 0 49	0 16 0 05	0 36 0 03		0 05 0 18	10 06 0 16	— 0 08 0 02	0 19 0 22	0 16 0 13	0 01 0 44	0 01	0 67 0 55	0 02 1 18	1st half 2nd "	{ 136d	
1 37 1 71	2 72 3 69	2 74 2 74	3 35 2 08	3 59 3 71	1 97 2 05		1 18 1 51	1 73 1 73	2 17 1 91	2 43 2 30	2 44 4 16	1 87 2 78	2 41 — 0 87	8 97 7 41	3 23 5 36	1st half 2nd "	{ 137d	

Analysis of working of each railway

NOTE—Railways not shown

Serial number	Particulars	Gauge	5' 6"											
		Number		1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a)	
		Calend dar year 1905 by half years	Bengal Central	Bengal Nagpur	Bom bay, Baroda and Central India	Eastern Bengal	East Indian	Great Indian Penin sula	Madras	Nizam's Guru State	North West ern.	Oudh and Rohil khand	Assam- Bengal	
	Average price of Coal fuel per ton in terms of Wood	Rs {	1st half 2nd ,,	5 89	2 96 2 57	16 68 14 68	6 02 6 17	1 97	11 11 11 32	10 70 10 14	4 68 4 67	13 61 13 76	7 33 8 02	7 42 7 44
	PER TOTAL TRAIN MILE													
138a	General superintendence (including office expenses)	Annas {	1st half	0 55	0 84	1 03	0 64	0 75	0 62	0 57	0 88	0 56	0 57	1 04
		2nd ,,			1 12	1 05	0 54	0 76	0 69	0 60	0 81	0 58	0 63	0 98
139a	Running expenses	" {	1st half	1 23	2 32	3 01	2 24	2 19	2 77	1 91	1 82	1 49	1 16	1 70
		2nd ,,			2 35	2 98	1 76	2 17	2 80	1 97	1 82	1 51	1 12	1 61
140a	Fuel	" {	1st half	2 22	1 39	3 21	2 69	0 95	4 2	4 61	2 00	5 18	3 12	2 73
		2nd ,,			1 15	5 92	2 69	0 96	4 39	4 32	1 83	5 38	3 36	2 40
141a	Water	" {	1st half	0 17	0 17	0 49	0 21	0 11	0 31	0 33	0 27	0 20	0 12	0 21
		2nd ,,			0 17	0 47	0 17	0 12	0 33	0 29	0 25	0 24	0 13	0 21
142a	Oil, tallow and other stores	" {	1st half	0 34	0 28	0 46	0 11	0 31	0 39	0 34	0 40	0 26	0 28	0 30
		2nd ,,			0 34	0 45	0 26	0 35	0 46	0 36	0 34	0 32	0 26	0 28
143a	Maintenance and renewal of locomotives	" {	1st half	3 31	2 04	3 70	1 88	2 58	3 45	4 63	2 01	3 24	1 42	2 26
		2nd ,,			2 13	4 69	6 12	2 02	3 74	3 16	1 67	2 73	1 84	1 63
143A (a)	Maintenance and renewal of machinery, tools and plant	" {	1st half	0 06	0 06	0 61	0 61	0 05	0 21	0 15	0 16	0 33	0 12	0 04
		2nd ,,			0 17	0 68	0 22	0 22	0 22	0 16	0 12	0 30	0 24	0 02
144a	Other charges (net)	" {	1st half	0 32	1 41	1 25	0 49	1 13	1 16	2 50	0 67	1 44	1 81	1 35
		2nd ,,			1 54	1 09	0 32	1 07	1 04	1 75	0 54	1 96	0 83	0 76
145a	Total locomotive expenses	" {	1st half	8 20	8 51	17 36	8 87	8 07	13 43	15 04	8 21	12 70	8 60	9 63
		2nd ,,			6 97	17 33	12 08	7 67	13 67	12 61	7 38	13 02	8 41	7 89
	Fuel consumed in terms of Coal (Kurhur-baree) lbs	{	1st half	42 13	65 88	57 12	62 46	71 68	56 92	59 82	59 73	53 25	53 68	49 26
		Wood	" {	2nd ,,	62 92	55 70	60 79	67 81	51 34	59 61	54 6	54 72	52 83	42 53
	PLR ENGINE MILE													
138b	General superintendence (including office expenses)	Annas {	1st half	0 45	0 71	0 86	0 43	0 56	0 55	0 48	0 73	0 49	0 48	0 86
		2nd ,,			0 95	0 80	0 37	0 57	0 61	0 51	0 69	0 51	0 53	0 79
139b	Running expenses	" {	1st half	1 00	1 97	2 50	1 51	1 62	2 42	1 61	1 52	1 30	0 98	1 39
		2nd ,,			2 00	2 52	1 21	1 63	2 46	1 67	1 54	1 31	0 85	1 29
140b	Fuel	" {	1st half	1 82	1 18	5 56	1 81	0 71	3 94	3 89	1 67	4 52	2 65	3 24
		2nd ,,			0 98	5 01	1 83	0 73	3 86	3 65	1 55	4 68	2 87	1 93
141b	Water	" {	1st half	0 14	0 14	0 41	0 14	0 08	0 27	0 28	0 3	0 18	0 10	0 17
		2nd ,,			0 14	0 39	0 12	0 09	0 29	0 25	0 21	0 21	0 11	0 16
142b	Oil, tallow and other stores	" {	1st half	0 28	0 25	0 38	0 07	0 23	0 34	0 28	0 33	0 23	0 24	0 22
		2nd ,,			0 9	0 38	0 18	0 26	0 41	0 30	0 29	0 28	0 23	0 22
113b	Maintenance and renewal of locomotives	" {	1st half	2 72	1 74	3 07	1 27	1 93	3 02	3 91	1 69	2 83	1 20	1 85
		2nd ,,			1 81	3 97	4 22	1 52	3 29	2 67	1 41	2 37	1 57	1 30
143A (b)	Maintenance and renewal of machinery, tools and plant	" {	1st half	0 05	0 06	0 50	0 42	0 03	0 18	0 13	0 13	0 29	0 10	0 03
		2nd ,,			0 15	0 57	0 16	0 16	0 19	0 13	0 10	0 26	0 21	0 02
144b	Other charges (net)	" {	1st half	0 26	1 20	1 04	0 33	0 83	1 01	2 11	0 57	1 26	1 53	1 10
		2nd ,,			1 30	0 92	0 22	0 80	0 92	1 48	0 45	1 71	0 70	0 61
145b	Total locomotive expenses	" {	1st half	6 72	7 25	14 42	5 98	5 99	11 73	12 69	6 67	11 10	7 28	7 88
		2nd ,,			7 62	14 65	8 93	5 76	12 03	10 66	6 24	11 33	7 17	6 92
	Fuel consumed in terms of Coal (Kurhur-baree) lbs	{	1st half	34 55	56 22	47 45	42 12	53 18	49 70	50 47	50 03	46 53	45 44	40 33
	Wood	" {	2nd ,,	53 45	47 11	41 93		50 94	47 81	50 42	46 42	47 61	45 04	34 06

DIX 18—continued

(by systems) during each half-year of 1905—contd.

do not prepare these Statistics

3' 3½"												2' 6"				Gauge
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (e)	18 (a) to (e)	11 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (f)	23 (a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number
Bengal and North-Western	Bhavnagar Gondal Juna-gad Purbandar	Burma	Eastern Bengal	Hyderabad Godavari Valley	Jodhpur-Bikaner	Noakhali (Bengal)	Rajputana-Malwa	Rohilkund-and Kumaon	South Indian	Sonthern Mahratta	Udaipur Chitor	Jubbulpore-Gondiaction	Kalka Simla	Khushalgarh Kohat Thal and Nowshera Durgai	Raipur Dharmtari	Calendar year 1905 by half years
EXPENSES																Serial number
5 69 6 01	15 99 15 71	11 16 11 18	7 10 7 49	6 54 4 77	11 88 14 15		14 58 15 02	10 77 7 68	12 77 12 82	10 92 10 84	18 32 20 02	2 85 2 50	21 00 21 00	14 73 14 21	2 90 2 50	1st half 2nd „ 1st half 2nd „
0 42	0 82	0 90	0 69	0 90	0 45		0 60	0 85	0 60	0 78	1 78	0 59	0 38	0 62	0 53	1st half
0 45	0 10	0 92	0 54	1 20	0 39		0 65	0 87	0 60	0 75	1 70	1 06	0 59	0 58	0 54	2nd „
0 81 0 78	1 18 1 23	2 66 2 66	1 17 1 10	1 45 1 55	0 78 0 71		1 72 1 86	0 76 0 73	1 54 1 58	1 76 1 70	0 91 0 78	1 31 1 25	2 25 2 64	1 30 1 08	1 12 1 00	1st half 2nd „
1 82 1 53	3 37 3 17	3 95 3 68	1 89 2 09	1 83 1 88	3 82 4 47		3 88 3 69	3 29 2 40	3 07 2 96	2 74 2 73	3 99 4 85	1 05 0 82	9 35 8 41	1 93 1 81	0 66 0 42	1st half 2nd „
0 16 0 15	0 17 0 18	0 92 0 31	0 16 0 16	0 16 0 20	0 34 0 43		0 28 0 29	0 17 0 14	0 20 0 18	0 22 0 21	0 23 0 20	0 28 0 22	2 51 1 67	0 64 0 52	0 34 0 30	1st half 2nd „
0 19 0 20	0 30 0 32	0 38 0 37	0 23 0 25	0 28 0 24	0 32 0 32		0 26 0 28	0 18 0 28	0 23 0 23	0 17 0 17	0 21 0 23	0 18 0 24	0 73 0 78	0 41 0 36	0 16 0 15	1st half 2nd „
0 97	1 43	1 73	2 64	0 69	1 44		2 11	1 14	3 90	2 28	2 76	1 47	2 51	1 62	0 65	1st half
0 91	1 63	0 20	1 50	1 23	1 12		2 93	0 98	1 32	2 04	1 26	0 87	1 64	1 67	0 75	2nd „
0 04	0 16	0 15	0 24	0 14	0 11		0 34	0 17	0 10	0 23	0 18	0 05	0 13	0 12	0 12	1st half
0 05	0 10	2 86	0 22	0 15	0 10		0 43	0 14	0 09	0 21	0 21	0 01	0 06	0 18	-0 10	2nd „
0 79 0 53	-0 01 0 01	0 60 1 06	1 72 0 45	1 08 1 07	0 57 0 76		0 71 0 68	0 41 0 35	0 22 0 15	0 95 1 19		3 44 3 27	0 61 0 22	0 25 0 31	1 58 1 34	1st half 2nd „
5 20 4 62	7 42 7 56	10 69 12 06	8 74 6 31	6 03 7 02	7 83 8 60		9 90 10 80	6 97 5 89	9 86 7 06	9 13 9 00	10 06 8 73	8 37 7 74	18 34 16 00	6 90 6 51	5 46 4 40	1st half 2nd „
47 56 35 83	29 47 28 28	49 61 46 10	37 22 39 01	99 14 49 87	45 06 44 18		37 26 34 41	42 78 43 83	37 72 32 37	35 15 35 29	25 80 30 39	52 01 46 12	74 49 67 09	18 33 17 82	31 97 23 72	1st half 2nd „
Included with the Assam Bengal																
0 34	0 74	0 74	0 54	0 83	0 42		0 51	0 68	0 54	0 69	1 67	0 50	0 25	0 50	0 52	1st half
0 37	0 81	0 76	0 42	1 08	0 37		0 56	0 76	0 55	0 67	1 59	0 58	0 52	0 48	0 54	2nd „
0 66 0 64	1 06 1 12	2 19 2 19	0 92 0 85	1 31 1 40	0 73 0 67		1 48 1 60	0 61 0 60	1 41 1 52	1 55 1 52	0 85 0 73	1 10 1 04	2 05 2 38	1 05 0 89	1 10 0 99	1st half 2nd „
1 49 1 25	3 03 2 80	3 25 3 04	1 49 1 61	1 21 1 23	3 58 4 21		3 35 3 18	2 64 1 93	2 80 2 72	2 40 2 45	0 74 0 67	0 89 0 69	8 52 7 58	1 56 1 48	0 65 0 42	1st half 2nd „
0 13 0 12	0 15 0 16	0 26 0 25	0 12 0 12	0 15 0 18	0 32 0 40		0 24 0 25	0 14 0 11	0 18 0 19	0 19 0 19	0 22 0 19	0 23 0 19	2 29 1 51	0 52 0 42	0 33 0 30	1st half 2nd „
0 16 0 16	0 27 0 30	0 31 0 20	0 18 0 21	0 25 0 30	0 30 0 30		0 23 0 24	0 15 0 17	0 21 0 22	0 15 0 15	0 19 0 22	0 15 0 20	0 66 0 71	0 33 0 29	0 16 0 15	1st half 2nd „
6 80	1 29	1 42	2 08	0 62	1 36		1 83	0 92	3 55	1 99	2 58	1 24	2 20	1 31	0 93	1st half
0 78	1 50	2 37	1 16	1 10	1 34		2 52	0 81	1 21	1 83	1 18	0 73	1 48	1 37	1 073	2nd „
0 03	0 15	0 12	0 19	0 13	0 10		0 30	0 13	0 09	0 20	0 17	0 04	0 05	0 11	0 12	1st half
0 04	0 09	0 17	0 17	0 14	0 09		0 87	0 11	0 08	0 19	0 20		0 05	0 15	-0 10	2nd „
0 64 0 44	-0 01 0 01	0 49 0 87	1 36 0 35	0 98 0 96	0 53 0 72		0 62 0 59	0 33 0 24	0 21 0 14	0 83 1 07		2 90 2 73	0 56 0 21	0 20 0 26	1 55 1 31	1st half 2nd „
4 25 3 80	6 68 6 87	8 78 9 95	6 88 4 89	5 48 6 30	7 34 8 10		8 55 9 81	5 60 4 73	8 09 8 48	7 99 8 07	9 42 8 18	7 05 6 46	16 72 14 44	5 58 5 34	5 36 4 34	1st half 2nd „
34 83 29 05	26 57 25 69	49 78 38 03	29 27 30 18	35 55 36 25	42 22 41 62		32 18 29 64	34 36 35 25	30 73 31 64	30 75 28 46	27 50 33 50	43 78 60 53	67 89 60 53	14 82 14 62	31 40 23 41	1st half 2nd „
												“	“			1st half 2nd „

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE Num ber Calen dar year 1905 by half years	5' 6"												
				1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a)		
			Bengal Central	Bengal Nagpur	Bom bay Baroda and Central India	Eastern Bengal	East Indian	Great Indian Peninsula	Madras	The Nizam's Garan teeed State	North Western	Oudh and Rohil khan	Assam Bengal		
PER 1,000 GROSS TON MILES														TABLE B—LOCOMOTIVE	
138c	General superintendence (including office expenses) Rs	{ 1st half 2nd ,	0 15	0 13 0 21	0 16 0 18	0 12 0 13	0 09 0 10	0 11 0 13	0 11 0 11	0 14 0 14	0 10 0 11	0 11 0 13	0 39 0 31		
139c	Running expenses	" { 1st half 2nd ,	0 35	0 37 0 44	0 47 0 50	0 43 0 48	0 28 0 29	0 50 0 54	0 35 0 37	0 30 0 32	0 26 0 28	0 23 0 23	0 61 0 51		
140c	Fuel	" { 1st half 2nd ,	0 63	0 23 0 21	1 07 0 99	0 51 0 66	0 12 0 13	0 82 0 84	0 85 0 80	0 33 0 32	0 90 0 99	0 62 0 70	1 03 0 76		
141c	Water	" { 1st half 2nd ,	0 05	0 03 0 03	0 08 0 08	0 04 0 04	0 01 0 02	0 06 0 06	0 06 0 05	0 04 0 01	0 04 0 01	0 03 0 03	0 08 0 06		
142c	Oil, tallow and other stores	" { 1st half 2nd ,	0 09	0 05 0 06	0 07 0 08	0 02 0 06	0 04 0 05	0 07 0 09	0 06 0 06	0 07 0 06	0 05 0 06	0 06 0 05	0 11 0 09		
143c	Maintenance and renewal of locomotives	" { 1st half 2nd ,	0 04	0 83 0 89	0 58 0 79	0 36 1 50	0 33 0 27	0 62 0 72	0 85 0 59	0 33 0 29	0 57 0 50	0 28 0 38	0 86 0 51		
A(c)	Maintenance and renewal of machinery, tools and plant	" { 1st half 2nd ,	0 02	0 01 0 03	0 09 0 11	0 12 0 05	0 01 0 03	0 04 0 04	0 03 0 03	0 03 0 02	0 06 0 05	0 02 0 03	0 02 0 02	0 02	
144c	Other charges (net)	" { 1st half 2nd ,	0 09	0 23 0 23	0 20 0 18	0 09 0 08	0 14 0 14	0 21 0 20	0 46 0 33	0 10 0 10	0 25 0 36	0 17 0 24	0 50 0 24		
145c	Total locomotive expenses	" { 1st half 2nd ,	2 32	1 38 1 65	2 72 2 91	1 69 2 95	1 02 1 03	2 43 2 62	2 77 2 31	1 31 1 29	2 23 2 39	1 71 1 74	3 63 2 48		
Fuel consumed (Coal (Kur-hurbaree) lbs in terms of Wood)															
		1st half	191 04	171 84 185 37	143 47 149 51	190 96 237 46	145 85 145 68	164 63 166 70	175 97 177 30	155 54 153 60	149 80 160 90	171 08 175 21	207 01 214 20		
PER TOTAL TRAIN MILE														TABLE C—CARRIAGE AND WAGON EXPENSES	
146a	General superintendence (including office expenses) Annas	{ 1st half 2nd ,	0 27	0 18 0 24	0 40 0 41	0 46 0 31	0 19 0 20	0 19 0 22	0 24 0 26	0 22 0 19	0 09 0 09	0 18 0 23	0 33 0 31		
147a	Repairs and renewals of coaching vehicles	" { 1st half 2nd ,	1 04	0 97 1 26	1 96 1 85	2 41 1 18	0 85 2 97	1 04 1 36	0 93 0 92	0 87 0 83	0 70 0 64	0 67 0 68	0 90 0 81		
148a	Repairs and renewals of goods vehicles	" { 1st half 2nd ,	0 75	0 71 0 63	2 46 1 78	1 62 1 54	0 89 0 91	1 22 1 32	2 26 2 29	0 94 1 07	0 84 0 87	0 37 0 29	1 46 0 98		
149a	Repairs and renewals of machinery, tools and plant	" { 1st half 2nd ,	-0 01	0 02 0 05	0 19 0 16	0 06 0 03	0 11 0 07	0 09 0 10	0 10 0 12	0 04 0 03	0 02 0 04	0 03 0 05	0 02 0 02		
150a	Cleaning and oiling	" { 1st half 2nd ,	0 41	0 54 0 47	0 51 0 49	0 32 0 23	0 21 0 22	0 45 0 50	0 33 0 33	0 40 0 34	0 30 0 31	0 37 0 32	0 22 0 23		
151a	Other charges (net)	" { 1st half 2nd ,		0 02 0 07	0 03 0 20	0 02 0 01	0 03 0 02	0 02 0 01	0 53 0 79	0 01 0 01	0 04 0 07	0 01 0 01	-0 02		
151a	Total carriage and wagon expenses	" { 1st half 2nd ,	1 63	2 44 2 72	5 55 4 89	4 89 3 30	2 28 4 39	3 01 3 51	4 44 5 37	2 48 2 16	1 99 2 02	1 63 1 61	2 91 2 35		
PER 1,000 VEHICLE MILES RUN BY HORSE VEHICLES															
146b	General superintendence (including office expenses) Rs	{ 1st half 2nd ,	1 32	0 38 0 61	0 95 1 09	1 45 0 95	0 41 0 46	0 63 0 78	0 77 0 78	0 48 0 45	0 27 0 28	0 41 0 63	1 19 1 00		
147b	Repairs and renewals of coaching vehicles calculated on coaching vehicle mileage	" { 1st half 2nd ,	4 67	2 05 13 14	18 08 11 41	16 52 9 27	7 61 24 83	11 80 12 41	8 93 8 87	8 54 5 37	6 44 5 37	5 81 5 14	6 69 6 47		
148b	Repairs and renewals of goods vehicles calculated on goods vehicle mileage	" { 1st half 2nd ,	4 53	1 51 2 15	9 26 8 12	9 58 7 74	2 52 2 81	5 96 7 76	10 85 13 57	2 70 5 83	3 63 4 91	1 19 1 27	9 96 5 14		
149b	Repairs and renewals of machinery, tools and plant	" { 1st half 2nd ,	-0 06	0 05 0 13	0 47 0 42	0 18 0 07	0 23 0 15	0 30 0 37	0 09 0 05	0 07 0 07	0 07 0 12	0 06 0 15	0 04 0 05		
150b	Cleaning and oiling	" { 1st half 2nd ,	2 17	1 14 1 22	1 22 1 29	1 02 0 71	0 46 0 49	1 52 1 77	1 04 1 02	0 90 0 82	0 88 0 89	0 67 0 90	0 78 0 71		
150b	Other charges (net)	" { 1st half 2nd ,		0 05 0 16	0 08 0 53	0 06 0 03	0 06 0 05	0 07 0 05	1 66 2 43	0 01 0 01	0 11 0 21	0 03 0 12	-0 07 0 02		
151b	Total carriage and wagon expenses	" { 1st half 2nd ,	8 06	5 18 7 02	13 27 12 85	15 51 10 10	4 92 9 92	10 14 12 55	13 97 16 39	5 50 5 14	5 86 6 30	3 75 4 50	10 38 7 45		

DIX 18—continued

(by systems) during each half-year of 1905—contd

do not prepare these statistics

3' 3 $\frac{3}{8}$ "													2' 6"				Gauge	
12 (a) & (f)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	11 (b)	2 (g) to (m)	20(a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (a) & (h)	1 (c)	Number		
Bengal and North Western	Bhavnagar Gondal Junagadh Porbandar	Burma	Eastern Bengal	Hyderabad Go dwari Valley	Jodhpur Bhawner	Noakhali (Bengal)	Rajputana Malwa	Bohil kund and Kumaon	South Indian	Udai pur Chitor	Jubbulpore Gondha extension	Kalka Simla	Khushal garh Kohat Thal and Nowshera Durgai	Rajpur Dharmtari	Calendrical year 1905 by half years	Number		
EXPENSES—concl'd																		
0.12	0.28	0.26	0.23	0.23	0.19				0.15	0.30	0.20	0.26	0.59	0.20	0.34	0.53	0.35	
0.14	0.32	0.23	0.16	0.10	0.12				0.18	0.31	0.21	0.20	0.54	0.36	0.45	0.61	0.47	
0.23	0.39	0.76	0.38	0.44	0.23				0.45	0.27	0.52	0.58	0.30	0.46	2.02	1.11	0.74	
0.23	0.45	0.80	0.32	0.52	0.21				0.51	0.26	0.54	0.59	0.26	0.43	2.01	1.14	0.85	
0.51	1.14	1.11	0.62	0.41	1.14				1.00	1.14	1.01	0.91	1.36	0.88	8.39	1.65	0.44	
0.46	1.15	1.11	0.61	0.46	1.34				1.02	0.81	1.01	0.94	1.39	0.28	0.43	1.90	0.86	
0.05	0.06	0.09	0.05	0.05	0.10				0.07	0.06	0.07	0.07	0.03	0.10	2.25	0.55	0.23	
0.05	0.07	0.09	0.05	0.06	0.13				0.08	0.05	0.04	0.07	0.07	0.08	1.28	0.54	0.26	
0.05	0.10	0.11	0.08	0.08	0.09				0.07	0.06	0.07	0.06	0.07	0.06	0.65	0.35	0.11	
0.06	0.12	0.11	0.07	0.08	0.10				0.08	0.08	0.08	0.06	0.07	0.08	0.60	0.37	0.12	
0.28	0.49	0.50	0.86	0.22	0.43				0.55	0.40	1.32	0.76	0.93	0.53	2.25	1.39	0.62	
0.28	0.60	0.87	0.41	0.41	0.43				0.80	0.34	0.45	0.71	0.39	0.30	1.25	1.75	0.64	
0.01	0.06	0.04	0.03	0.04	0.04				0.09	0.05	0.03	0.07	0.06	0.02	0.01	0.11	0.08	
0.02	0.04	0.06	0.06	0.05	0.03				0.12	0.05	0.03	0.07	0.07	0.01	0.01	0.19	-0.08	
0.22	-0.01	0.17	0.56	0.33	0.17				0.18	0.14	0.08	0.32		1.20	0.55	0.21	1.05	
0.15		0.32	0.12	0.37	0.23				0.18	0.10	0.05	0.41		1.12	0.18	0.33	1.14	
1.47	2.51	3.07	2.86	1.85	2.33				2.56	2.42	3.33	3.03	3.33	2.91	16.44	5.90	3.62	1st half
1.39	2.75	3.64	1.83	2.35	2.59				2.97	2.00	2.41	3.11	2.79	2.65	12.24	6.83	3.76	2nd „
192.18	159.63	227.97	191.76	192.23	214.49				154.34	237.40	162.07	186.69	149.57	291.69	1,068.18	250.96	330.85	1st half
170.21	164.69	222.52	181.08	216.00	212.80				151.63	237.81	176.89	191.93	155.43	252.84	821.08	239.10	324.00	2nd „
WAGON EXPENSES																		
0.15	0.24	0.26	0.26	0.12	0.16				0.23	0.39	0.20	0.24	0.45	0.13	0.27	0.08	0.12	
0.16	0.26	0.27	0.26	0.15	0.14				0.26	0.39	0.20	0.23	0.40	0.25	0.58	0.05	0.13	
0.38	0.33	0.66	1.15	0.24	0.56				1.11	0.84	0.69	0.96	0.28	0.68	0.46	0.83	0.10	
0.39	1.05	0.76	0.87	0.32	0.48				1.30	0.54	0.58	0.87	0.36	1.78	1.99	0.40	0.50	
0.44	0.98	0.85	-0.85	0.23	0.30				1.40	0.56	0.88	0.98	0.01	0.18	0.27	0.45	0.12	
0.40	1.59	1.13	0.20	0.25	0.37				1.37	0.41	1.04	0.76	0.22	0.39	0.39	0.17	0.14	
0.02	0.08	0.06	0.04	0.03	0.04				0.11	0.05	0.03	0.05	0.03	0.01	0.21	0.01	0.02	
0.03	0.05	0.06	0.03	0.02	0.04				0.10	0.05	0.03	0.04	0.02	0.01	0.04		0.02	
0.29	0.21	0.28	0.32	0.18	0.23				0.29	0.27	0.20	0.19	0.50	0.49	0.73	0.51	0.31	
0.31	0.24	0.27	0.31	0.23	0.20				0.31	0.32	0.25	0.19	0.49	0.45	0.48	0.41	0.22	
0.01	.	0.02	0.03	0.01	0.01				0.02	-0.04	0.01	0.01	0.01	0.02	0.01	0.04	0.03	
0.02	.	0.03	0.03	0.01	0.01				-0.29	-0.04	0.01	0.01	0.01	0.10	-0.98	0.07	0.03	
1.29	1.84	2.13	0.95	0.81	1.30				3.16	2.11	2.05	2.43	1.80	1.50	1.94	1.92	0.68	1st half
1.31	3.10	2.52	1.71	0.97	1.24				3.05	1.74	2.06	2.08	1.50	2.98	2.45	1.13	1.04	2nd „
0.35	0.62	0.67	0.77	0.37	0.45				0.50	1.02	0.62	0.67	1.18	0.36	2.47	0.47	0.46	1st half
0.40	0.68	0.72	0.74	0.53	0.41				0.62	1.01	0.65	0.66	1.06	0.75	4.49	0.31	0.78	2nd „
2.29	1.66	4.83	3.41	2.57	3.28				8.27	6.04	4.14	8.58	1.18	1.96	4.25	8.98	0.38	1st half
2.13	4.06	5.47	5.59	2.67	2.82				8.00	3.51	8.75	7.17	1.42	12.85	15.47	5.18	7.17	2nd „
1.64	5.12	3.32	-2.53	1.05	1.68				4.48	2.85	5.64	3.98	0.30	0.54	2.57	5.37	0.44	1st half
1.75	10.11	4.95	0.99	1.50	2.02				5.46	2.03	6.85	3.25	1.88	2.07	3.01	1.94	1.36	2nd „
0.05	0.20	0.14	0.13	0.11	0.12				0.25	0.12	0.10	0.14	0.07	0.01	1.99	0.07	0.01	1st half
0.07	0.14	0.16	0.10	0.06	0.10				0.24	0.13	0.10	0.12	0.01	0.04	0.30	0.02	0.10	2nd „
0.65	0.54	0.71	0.96	0.57	0.65				0.65	0.70	0.91	0.54	1.33	1.43	6.75	2.92	1.13	1st half
0.74	0.63	0.74	0.87	0.77	0.55				0.75	0.85	0.83	0.53	1.30	1.37	3.38	2.64	1.28	2nd „
0.03	-0.01	0.05	0.09	0.01	0.02				0.04	-0.14	0.03	-0.03	0.03	0.06	0.03	-7.62	0.21	0.13
0.04		0.07	0.09	0.03	0.02				-0.70	0.02	-0.14	-0.03	0.03	0.33	-7.62	0.40	0.17	1st half
2.97	4.80	5.43	2.63	2.57	3.72				7.06	5.56	6.36	6.79	3.76	4.35	18.06	10.92	2.55	1st half
3.17	8.13	6.85	4.78	3.37	3.50				7.37	4.68	6.73	5.86	5.73	9.06	19.03	6.81	6.05	2nd „

Analysis of working of each railway

Note.—Railways not shown

Serial number	PARTICULARS	Gauge	5' 6"										
		Number	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a)	
		Calon dar year 1905 by half- years	Bengal Central	Bengal Nagpur	Bombay, Baroda and Central India	Eastern Bengal	Last Indian	Great Indian Peninsula	Madra	The Nizam Guaran- teed State	North West ern	Oudh and Pohul Khand	Assam Bengal
TABLE D—TRAFFIC													
152a	General superintendence (including office expenses) <i>Annas</i>	{ 1st half 2nd "	1.07	0.89	0.90	1.79	0.85	0.50	0.78	0.70	0.50	0.74	0.91
153a	Station staff	{ 1st half 2nd "	3.22	2.23	3.31	6.45	2.79	2.04	2.11	1.23	2.12	2.03	2.20
154a	Train staff	{ 1st half 2nd "	0.55	0.70	0.67	1.18	1.14	1.30	0.67	0.71	0.60	0.82	0.63
155a	Fuel, lighting, water and general stores	{ 1st half 2nd "	0.46	0.52	0.73	0.97	0.69	0.62	0.50	0.49	0.33	0.34	0.54
156a	Clothing	{ 1st half 2nd "	0.02	0.05	0.12	0.10	0.03	0.07	0.03	0.01	0.04	0.16	0.02
157a	Printing, stationery and tickets	{ 1st half 2nd "	0.11	0.18	0.48	0.40	0.25	0.17	0.11	0.27	0.15	0.26	0.27
158a	Charges for delivery and collection of goods, etc	{ 1st half 2nd "				0.03	0.01	0.01	0.01	0.01		0.02	0.01
159a	Miscellaneous expenses	{ 1st half 2nd "	0.03	0.01	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.02	0.01
160a	Payments to other lines	{ 1st half 2nd "	0.53	0.63	0.13		0.08	0.11	0.04	0.33	0.15	0.21	
161a	Other charges (net)	{ 1st half 2nd "		0.01	0.01	0.02	0.01	0.02	0.05	0.02	0.02	0.01	0.01
162a	Total traffic expenses	{ 1st half 2nd "	6.29	5.22	6.60	10.57	5.90	5.85	4.70	4.71	4.22	5.39	4.87
PER CENT ON TRAFFIC EARNINGS													
(Abstracts II and I of Revenue Accounts)													
152b	General superintendence (including office expenses) <i>Per cent</i>	{ 1st half 2nd "	2.32	1.27	0.85	2.31	1.10	0.72	1.24	0.78	0.81	1.12	2.81
153b	Station staff	{ 1st half 2nd "	6.96	3.17	3.18	10.71	3.59	2.90	3.32	2.53	3.52	5.79	6.82
154b	Train staff	{ 1st half 2nd "	1.19	0.99	0.83	1.96	1.46	1.65	1.05	0.93	1.32	1.67	2.07
155b	Fuel, lighting, water and general stores	{ 1st half 2nd "	0.99	0.74	0.70	1.62	0.88	0.88	0.79	0.65	0.87	1.10	1.60
156b	Clothing	{ 1st half 2nd "	0.05	0.08	0.12	0.16	0.08	0.10	0.12	0.01	0.06	0.33	0.35
157b	Printing, stationery and tickets	{ 1st half 2nd "	0.89	0.26	0.46	0.67	0.32	0.24	0.05	0.35	0.25	0.52	0.77
158b	Charges for delivery and collection of goods, etc	{ 1st half 2nd "		0.01		0.05	0.01	0.02	0.02	0.03		0.01	0.01
159b	Miscellaneous expenses	{ 1st half 2nd "	0.06	0.02	0.03	0.05	0.02	0.02	0.05	0.02	0.01	0.10	0.01
160b	Payments to other lines	{ 1st half 2nd "	1.15	0.89	0.13		0.10	0.16	0.07	0.39	0.09	0.43	
161b	Other charges (net)	{ 1st half 2nd "		0.01	0.01	0.02	0.02	0.02	0.07	0.02	0.01	0.02	0.01
162b	Total traffic expenses	{ 1st half 2nd "	13.61	7.44	6.32	17.55	7.58	6.91	7.41	5.68	6.90	11.03	14.50
General superintendence per cent on traffic earnings (including steam-boat) <i>Per cent</i>													
			2.32	1.27	0.86	2.31	1.09	0.72	1.21	0.78	0.83	1.52	2.81

DIX 18—continued

(by systems) during each half-year of 1905—contd.

do not prepare these statistics

Analysis of working of each railway

NOTE.—Railways not shown

Serial number	Particulars	Gauge	5' 6'										11 (a)
		Number	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)		
		Calend dar year 1905 by half years	Bengal Central	Bengal Nagpur	Bom bay, Baroda, and Central India	Eastern Bengal	East Indian	Great Indian Peninsula	Madras	The Niram Guaran teeed State	North West ern	Oudh and Orissa Khand	Assam- Bengal
PER TOTAL TRAIN MILE													TABLE E—GENERAL
163a	Home expenditure Annas	{ 1st half	2 48	0 77	0 26	0 23	0 33	0 37	0 37	0 59	0 03	0 03	1 66
		2nd „		0 69	0 36		0 38	0 42	0 38	0 61			1 42
164a	Agents office—salaries and expenses	{ 1st half	2 27	0 27	0 22	0 11	0 13	0 15	0 31	0 29	0 11	0 21	0 80
		2nd „		0 36	0 32	0 31	0 14	0 15	0 35	0 28	0 11	0 26	0 75
165a	Audit, accounts and pay office	{ 1st half	1 68	0 73	0 92	0 88	0 17	0 53	0 68	1 16	0 40	0 60	1 27
		2nd „		0 79	0 93	0 76	0 19	0 58	0 69	1 14	0 42	0 59	1 15
166a	Stores Department	{ 1st half	0 20	0 20	0 25	0 29	0 16	0 16	0 12	0 23	0 11	0 17	0 53
		2nd „		0 22	0 35	0 26	0 16	0 19	0 12	0 22	0 10	0 18	0 45
167a	Medical „	{ 1st half	0 25	0 22	0 21	0 22	0 16	0 10	0 13	0 17	0 10	0 10	0 43
		2nd „		0 25	0 20	0 18	0 16	0 11	0 15	0 10	0 10	0 11	0 40
168a	Rents and miscellaneous	{ 1st half	0 71	0 7	0 29	0 35	0 29	0 11	0 13	0 32	0 11	0 26	0 17
		2nd „		0 29	0 27	0 27	0 29	0 12	0 24	0 23	0 12	0 22	0 16
169a	Police „	{ 1st half	0 50	0 19	0 16	0 18	0 23	0 21	0 33	0 58	0 2	0 18	0 24
		2nd „		0 21	0 14	0 16	0 24	0 24	0 34	0 57	0 13	0 18	0 20
170a	Advertising „	{ 1st half	0 02	0 03	0 01	0 05	0 01	0 01	0 01	0 01	0 01	0 02	0 01
		2nd „		0 05	0 01	0 04	0 02	0 01	0 02	0 01	0 01	0 02	0 02
171a	Electric telegraph „	{ 1st half	1 02	0 86	1 16	0 96	0 76	0 67	0 73	0 63	0 70	0 65	1 21
		2nd „		1 60	1 18	0 81	0 77	0 72	0 82	0 61	0 64	0 67	1 11
172a	Other charges (net)	{ 1st half				0 01	0 01	0 01	0 11		0 05	0 01	0 01
		2nd „				0 01	0 02	0 01	0 19				
173a	Total general charges	{ 1st half	9 16	3 54	3 88	2 53	2 51	2 35	2 98	3 97	1 71	2 10	6 35
		2nd „		3 86	1 06	2 78	2 67	2 55	3 30	3 96	1 71	2 24	5 67
PER CENT ON TOTAL EARNINGS													
163b	Home expenditure Per cent	{ 1st half	1 58	1 06	0 21	0 39	0 19	0 52	0 56	0 74	0 15	0 11	4 68
		2nd „		1 08	0 58		0 51	0 68	0 60	0 88			3 52
164b	Agents office—salaries and expenses	{ 1st half	4 20	0 37	0 20	0 68	0 16	0 21	0 3	0 36	0 23	0 43	2 26
		2nd „		0 57	0 33	0 13	0 19	0 24	0 55	0 88	0 21	0 3	1 87
165b	Audit, accounts and pay office	{ 1st half	3 10	1 00	0 87	1 16	0 60	0 71	1 04	1 17	0 65	1 14	3 57
		2nd „		1 23	0 95	1 05	0 66	0 95	1 08	1 57	0 76	1 23	2 85
166b	Stores Department	{ 1st half	0 36	0 27	0 33	0 19	0 20	0 23	0 18	0 26	0 17	0 22	1 19
		2nd „		0 34	0 37	0 31	0 23	0 31	0 18	0 30	0 18	0 35	1 12
167b	Medical „	{ 1st half	0 46	0 30	0 29	0 37	0 29	0 15	0 19	0 23	0 17	0 19	1 22
		2nd „		0 39	0 21	0 25	0 21	0 18	0 23	0 22	0 18	0 22	0 98
168b	Rents and miscellaneous	{ 1st half	1 37	0 37	0 27	0 53	0 26	0 20	0 19	0 10	0 23	0 40	0 49
		2nd „		0 15	0 29	0 37	0 39	0 20	0 38	0 47	0 21	0 45	0 39
169b	Police „	{ 1st half	0 92	0 26	0 13	0 70	0 28	0 30	0 32	0 72	0 19	0 84	0 68
		2nd „		0 34	0 47	0 22	0 33	0 35	0 41	0 78	0 23	0 38	0 49
170b	Advertising „	{ 1st half	0 04	0 03	0 01	0 08	0 01	0 01	0 01	0 02	0 01	0 01	0 02
		2nd „		0 07	0 01	0 06	0 02	0 01	0 03	0 01	0 02	0 03	0 05
171b	Electric telegraph „	{ 1st half	1 88	1 18	1 03	1 59	0 96	0 94	1 12	0 79	0 97	1 23	3 50
		2nd „		1 56	1 21	1 12	1 04	1 18	1 39	0 81	1 13	1 39	2 78
172b	Other charges (net)	{ 1st half				0 02	0 02	0 01	0 21		0 01	0 02	0 01
		2nd „				0 01	0 03	0 02	0 30		0 01	0 02	0 01
173b	Total general charges	{ 1st half	16 91	4 84	3 63	5 96	3 18	3 31	4 56	4 99	2 78	4 31	17 91
		2nd „		6 03	4 28	3 85	3 39	4 15	5 19	5 45	3 63	4 65	14 06
PER CENT ON GROSS EARNINGS													
TABLE G—SPECIAL AND MISCELLANEOUS EXPENSES													
174	Law charges Per cent	{ 1st half	0 12	0 05	0 02	0 01	0 04	0 01	0 13	0 01			0 08
		2nd „		0 01	0 04	0 02	0 04	0 05	0 10	0 02			0 06
175	Compensation . . .	{ 1st half	0 85	1 06	0 06	0 42	0 09	0 23	0 33	0 01	0 09	0 09	0 05
		2nd „		—0 16	0 13	0 40	0 07	0 10	0 00				0 13
176	Rates and taxes	{ 1st half	0 33	0 12	0 12	0 26	0 16	0 09	0 10	0 03	0 09	0 09	0 13
		2nd „		0 13	0 13	0 20	0 15	0 11	0 26	0 13	0 10	0 04	0 07
177	Payments to other lines	{ 1st half	5 17	1 32	0 15	0 17	1 29	0 80	0 89	0 31	0 38	1 12	0 38
		2nd „		0 39	0 17	1 75	0 17	0 94	0 77	0 48	0 24	2 20	0 47
178	Other charges (net)	{ 1st half	1 01	1 03	0 48	1 21	0 34	0 66	1 17	1 35	0 73	0 00	4 95
		2nd „		1 66	0 85	0 08	0 26	1 24	1 27	1 08	0 94	1 08	4 51
179	Total special and miscellaneous expenses	{ 1st half	7 48	3 58	0 83	2 07	1 92	1 99	2 63	1 71	1 29	3 16	5 59
		2nd „		3 03	1 32	3 85	0 99	2 44	2 40	1 70	1 37	3 16	5 24

DIX 18—continued

(by systems) during each half-year of 1905—contd

do not prepare those statistics

3' 3"													2' 6"				GAUGE
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (e)	11 (b)	2 (g) to (m)	20 (n) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number	
Bengal and North West ern.	Buav nagar Goudal Junagad Por bandar	Burma.	East ern Bon gal	Hyde- ra- bad Go- davari Valley	Jodh- pur-Bi- kaner	Noa- khali (Ben- gal)	Raj- putana Malwa	Rohul kund and Kumaon.	South Indian	South ern Mah- ratta.	Udaipur- Chitor	Jubbulpore Gondia exten- sion.	Kal- la Simla	Khushal- gah Kohat Thal and Nowshera Durgal	Rajpur- Dham- tari	Calendar year 1905 by half years	Serial number
CHARGES																	
0 51 0 53	0 13 0 15	0 70 0 73		0 58 0 87			0 15 0 17	0 96 1 11	0 74 0 36	0 70 0 65		2 65 2 12	0 03 1 33	0 09	1 17 1 15	1st half 2nd "	{ 163a
0 19 0 17	0 87 1 08	0 24 0 24		0 23 0 38	0 11 0 10		0 12 0 20	0 23 0 27	0 23 0 21	0 26 0 25	1 44 1 41		1 76 1 99	0 14 0 14	..	1st half 2nd "	{ 164a
0 58 0 67	1 50 1 52	0 56 0 63		1 15 1 56	0 56 0 51		0 53 0 58	0 68 0 70	0 72 0 70	0 69 0 67	1 09 1 07	0 10	2 31 2 37	0 40 0 43	0 18	1st half 2nd "	{ 165a
0 08 0 09	0 32 0 34	0 20 0 20		0 22 0 29	0 11 0 10		0 20 0 21	0 15 0 16	0 14 0 17	0 19 0 19	0 12 0 11	0 01	0 16 0 14	0 10 0 10	..	1st half 2nd "	{ 166a
0 10 0 11	0 39 0 42	0 21 0 21		0 25 0 33	0 09 0 08		0 12 0 12	0 10 0 11	0 22 0 22	0 11 0 11	0 24 0 22	0 25	0 35 0 51	0 17 0 09	..	1st half 2nd "	{ 167a
0 13 0 11	0 30 0 32	0 15 0 16		0 29 0 41	0 11 0 11		0 17 0 17	0 44 0 31	0 18 0 23	0 15 0 13	0 19 0 21	0 02	1 17 0 03	0 14 0 90	0 11 0 05	1st half 2nd "	{ 168a
0 21 0 22	0 96 1 02	0 39 0 36		0 43 0 59	0 09 0 09		0 26 0 28	0 34 0 35	0 23 0 20	0 36 0 36	..	0 07	0 20 0 45	0 59 0 46	0 31 0 40	1st half 2nd "	{ 169a
0 01 0 01	0 01 0 01	0 02 0 01		0 02 0 01				0 01 0 02	0 01 0 01	0 01 0 02			0 05 0 03	0 01 0 01	..	1st half 2nd "	{ 170a
0 56 0 68	1 17 1 28	0 69 0 71		0 57 0 76	0 66 0 83		0 66 0 73	0 69 0 63	0 66 0 86	0 87 0 93	0 95 1 90	1 44	0 65 0 68	0 89 0 67	0 60 0 50	1st half 2nd "	{ 171a
-0 01 -0 01	0 13 0 02			0 03 0 05				0 01 0 01		0 01 0 01			0 02 0 05		..	1st half 2nd "	{ 172a
2 37 2 51	5 64 6 08	3 29 3 27		3 83 5 25	1 93 1 82		2 21 2 46	3 65 3 83	3 14 3 07	3 37 3 28	4 06 3 98	4 18 4 55	6 70 5 60	2 53 2 03	2 19 2 23	1st half 2nd "	{ 173a
Included with the 5' G' Gauge																	
1 05 1 22	0 19 0 26	1 21 1 57		1 08 1 93			0 21 0 29	1 98 2 26	1 45 0 78	1 57 1 62		7 93 5 88	0 05 1 57	0 52	3 53 5 16	1st half 2nd "	{ 163b
0 39 0 40	1 27 1 87	0 41 0 51		0 53 0 84	0 21 0 18		0 20 0 23	0 58 0 54	0 44 0 46	0 57 0 62	2 38 2 22		2 81 2 35	0 77 0 87	..	1st half 2nd "	{ 164b
1 19 1 57	2 19 2 63	0 95 1 32		2 13 3 44	1 08 0 96		0 87 0 98	1 40 1 41	1 41 1 49	1 54 1 67	1 81 1 68	0 29	3 69 2 80	2 23 2 68	0 83	1st half 2nd "	{ 165b
0 17 0 20	0 45 0 59	0 35 0 42		0 40 0 65	0 20 0 20		0 33 0 37	0 32 0 32	0 28 0 36	0 42 0 48	0 20 0 18	0 03	0 26 0 17	0 79 0 62	..	1st half 2nd "	{ 166b
0 21 0 25	0 57 0 72	0 35 0 41		0 46 0 74	0 18 0 16		0 20 0 21	0 21 0 21	0 43 0 47	0 92 0 85	0 40 0 34	0 69	0 56 0 60	0 94 0 58	..	1st half 2nd "	{ 167b
0 27 0 26	0 44 0 54	0 26 0 31		0 54 0 91	0 20 0 20		0 27 0 29	0 91 0 63	0 35 0 49	0 93 0 33	0 32 0 37	0 05 0 09	1 87 1 06	0 77 0 85	0 31 0 22	1st half 2nd "	{ 168b
0 44 0 50	1 41 1 78	0 67 0 76		0 80 1 31	0 18 0 17		0 43 0 46	0 72 0 78	0 44 0 42	0 80 0 89		0 22 0 25	0 31 0 53	3 32 2 93	0 93 1 80	1st half 2nd "	{ 169b
0 01 0 02	0 01 0 02	0 03 0 03		0 03 0 01	0 01 0 01		0 01 0 01	0 02 0 03	0 02 0 03	0 01 0 06		0 00 0 04	0 03 0 07	..	1st half 2nd "	{ 170b	
1 16 1 47	1 72 2 13	1 19 1 50		1 04 1 67	1 63 1 54		1 08 1 42	1 42 1 46	1 30 1 35	1 94 2 13	1 62 1 46	4 36 5 39	1 04 1 79	4 97 4 22	1 81 2 25	1st half 2nd "	{ 171b
-0 01 -0 02	0 23 0 01			0 07 0 11				0 02 0 02	0 01 0 01				0 03 0 03	0 02 0 39	..	1st half 2nd "	{ 172b
4 89 5 89	8 25 10 52	5 66 6 93		7 08 11 61	3 74 3 11		3 63 4 18	7 56 7 64	6 14 6 57	7 51 8 16	6 73 6 25	12 61 12 62	10 71 6 60	14 16 13 13	6 53 10 26	1st half 2nd "	{ 173b
LANEOUS EXPENSES																	
0 02 0 05	0 02 0 01	0 02 0 02		0 01 0 06			0 02 0 01	0 03 0 01	-0 03 0 01	-		0 00 0 16			1st half 2nd "	{ 174	
0 03 0 04	0 03 0 07	0 03 0 07		0 02 0 01	0 01 0 01		0 06 0 13	0 08 0 05	0 03 0 04	0 05 0 08	0 03 0 02	0 03 0 01	0 09 0 05	0 06 0 06	0 01 0 01	1st half 2nd "	{ 175
0 02 0 06		0 08 0 02		0 04 0 26			0 12 0 12	0 01 0 01	0 12 0 22	0 09 0 18	-	0 05 0 06			1st half 2nd "	{ 176	
0 23 0 50	0 52 0 22			0 19 0 26	1 85 1 67		0 15 0 16	-0 01 0 18	0 18 0 31	0 24 0 15	1 18 1 42	0 18			..	1st half 2nd "	{ 177
0 45 0 53	0 94 0 97	1 04 1 12		0 42 1 38	0 44 0 44		0 48 0 55	1 65 1 57	0 72 0 68	1 21 1 28	0 47 0 31	0 67 1 00	1 28 1 08	2 48 2 64	0 58 0 93	1st half 2nd "	{ 178
0 75 1 18	1 49 1 24	1 17 1 23		0 68 1 97	2 30 2 20		0 83 1 00	1 76 1 63	1 05 1 26	1 56 1 60	1 68 1 70	1 00 1 26	2 41 1 35	2 54 2 70	0 59 0 94	1st half 2nd "	{ 179

Analysis of working of each railway

EXTRACT FROM TABLES REINTED

NOTE.—Railways not shown

Serial number	PARTICULARS	GAUGE	5' 6"											
			Number	5' 6"										
				Calen dar year 1905 by half- years	Bengal Central	Bengal Nagpur	Bom bey, Baroda and Central India	East ern Bengal	East Indian	Great Indian Peninsula	Madras	The Nizam's Guaran- teed State	North West- ern	Ondh and Rohil khand	As am Bengal
FROM APPENDIX I														
180	Average number of locomotives on the line No	{	1st half	24	253	220	142	950	835	205	59	733	200	76
			2nd ,,		239	216	183	911	836	265	59	746	202	76
181	Average miles run per locomotive per diem Miles	{	1st half	55 26	73 14	51 19	57 00	63 68	59 75	65 13	51 26	70 67	80 74	60 86
			2nd ,,	"	59 67	49 72	68 59	64 53	53 50	62 43	57 01	72 21	78 86	67 14
lbs coal per engine mile (coal burning engines)—														
182	Coaching lbs	{	1st half			47 98					43 20			
			2nd ,,			46 16					41 23			
183	Goods " "	{	1st half	43 19	56 22	47 01	52 65	53 19	49 70	50 10	52 74	46 53	45 44	40 33
			2nd ,,	"	53 45	48 09	51 19	50 94	47 61	50 45	47 55	47 61	43 01	31 06
184	Mixed " "	{	1st half			51 80					51 31			
			2nd ,,			44 78					46 07			
lbs wood per engine mile (wood burning engines)—														
185	Coaching lbs	{	1st half											
			2nd ,,											
186	Goods " "	{	1st half	"										
			2nd ,,	"										
187	Mixed " "	{	1st half											
			2nd ,,											
Average gross weight of trains—														
188	Coaching . . . Tons	{	1st half	166 11	203 95	177 03	171 20	206 61	168 29	161 56	137 72	236 89	203 16	120 53
			2nd ,,		190 25	172 77	197 51	223 68	174 09	155 14	178 26	236 53	182 03	103 57
189	Goods " "	{	1st half	180 00	415 57	575 89	594 59	573 58	353 82	470 37	319 17	331 10	322 22	86 88
			2nd ,,	"	385 70	563 97	431 67	539 66	337 26	162 02	270 58	310 33	333 57	180 13
190	Mixed " "	{	1st half	166 11	309 25	201 61	219 46	291 80		285 67	317 16	265 17	221 40	114 07
			2nd ,,	"	290 85	192 32	207 10	261 15		292 11	321 65	255 76	202 05	150 90
Average through speed of trains—														
191	Coaching Miles per hour	{	1st half	20	27 94	22 83	19 07	22 00	23 54	21 25	22 68	20 13	28 79	
			2nd ,,	"	28 96	23 96	19 07	22 00	23 46	21 23	22 68	20 14	28 82	
192	Goods "	{	1st half	11	11 89	10 24	15 00	12 00	12 05	11 23	9 50	11 49	11 15	
			2nd ,,	"	11 68	10 78	15 00	12 00	10 49	11 23	9 50	11 36	10 72	
193	Mixed "	{	1st half	15	17 33	15 99	14 30	18 00	11 41	10 62	14 55	14 66	18 95	13 12
			2nd ,,	"	17 38	15 78	14 30	18 00	15 98	10 62	14 55	11 32	16 29	13 12
FROM APPENDIX II.														
194	Average mileage per diem of coaching vehicles, including brakes Miles	{	1st half	9,766	96,320	92,400	49,995	275,508	260,979	91,715	10,247	327,361	109,951	30,703
			2nd ,,	"	89,747	91,627	69,144	291,670	277,852	90,689	16,059	347,400	112,986	30,603
195	Goods ditto ditto "	{	1st half	4,892	270,137	158,137	61,612	1,049,960	634,096	233,218	45,795	705,805	156,678	34,156
			2nd ,,	"	199,186	119,474	110,090	935,474	485,570	224,063	42,143	601,040	147,535	50,079
FROM APPENDIX V														
196	Average age of sleepers— Years	{	1st half	12 04	5 39	9 41	8 00	9 80		5 00		7 43	11 89	
			2nd ,,	"	5 74	9 62	8 00	9 53		5 33		8 01	11 79	"
197	Iron "	{	1st half	"	9 86	12 99	11 00	9 86		33 59		11 18	14 90	
			2nd ,,	"	10 23	13 49	11 50	9 53		32 88		11 78	14 66	
Percentage of removals—														
198	Wood . . . Percent	{	1st half	4 72	3 55	3 22	9 11	3 16	4 79	1 77	3 40	1 33	0 18	2 02
			2nd ,,	"	6 14	2 92	4 07	2 77	5 21	3 10		1 01	2 42	1 38
199	Iron "	{	1st half	"	0 29	0 44	2 61	3 29	2 40	0 29		4 27	7 30	
			2nd ,,	"	0 66	0 47	0 63	2 28	0 56	0 29		2 81	6 91	1

DIX 18—concluded.

(by systems) during each half-year of 1905—concl'd.

AS APPENDICES TO THE ANALYSIS

do not prepare these statistics

3' 3½"												2' 6'				GAUGE		
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (c)	11 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (a)& (h)	1 (e)	Number	Serial number	
Bengal and North West ern	Bhavna gar (Gru dal Ju nagad Porban dar)	Burma	Eastern Bengal	Hydera bid Go davari Valley	Jodh pur Bika ner	Noa Lhali (Ben gal)	Rajpu tana Malwa	Rohil Kund and Ku maon	South Indian	South ern Mah ratta	Udai pur Chitor	Jubbul pore Gondia exten sion	Kalka Simla	Khushal garh Kohat Thal and Nowshera Durgai	Raipur Dham tari	Calendar year 1905 by half years		
218	31	242	132	50	48		434	83	219	222	3	10	18	26	4	1st half		
234	27	250	140	50	48		448	86	217	237	3	11	24	28	4	2nd ,		
72 25	57 87	67 41	58 23	65 80	64 20		56 57	68 65	61 25	60 17		72 89	40 00	35 42	43 22	1st half	{ 180	
63 05	59 83	63 65	61 63	49 07	66 23		51 71	59 37	65 73	55 95		71 19	19 97	43 13	43 10	2nd ,	{ 181	
																1st half	{ 182	
																2nd ,	{ 183	
31 83	29 49	40 78	36 28	35 23	42 22		36 18		30 73	32 39	25 80	43 78	65 00	14 82	31 40	1st half	{ 183	
29 05	28 53	38 03	36 73	36 25	41 62		33 28		29 68	32 56	28 46	39 43	61 46	14 62	28 41	2nd ,	{ 184	
																1st half	{ 185	
																2nd ,	{ 186	
																1st half	{ 187	
168 23	90 44	129 28	117 00	215 82	103 29	Included with the Assam Bengal	108 32		91 63	92 94			60 00	77 26		1st half	{ 188	
147 65	91 68	129 53	134 85	*50 77	211 45		114 55		91 39	93 74			60 00			2nd ,	{ 188	
216 70	186 65	204 01	237 67	185 05	191 39		273 09		163 65	281 52			166 68	60 00	41 69	92 13	1st half	{ 189
178 37	193 25	182 10	299 11	195 99	125 12		268 74		158 41	267 01			160 66	65 00	35 54	85 80	2nd ,	{ 189
179 53	144 97	178 77	121 32	153 42	127 10		130 82		157 32	212 57	144 99		148 18	60 00	58 41	74 08	1st half	{ 190
166 51	138 86	172 48	146 22	142 82	201 72		135 99		156 00	219 50	156 18		135 55	77 70	43 70	55 62	2nd ,	{ 190
17 00	20 05	18 82	19 23				17 09		18 00	16 18				9 00		1st half	{ 191	
17 00	20 65	19 82	19 28				17 97		18 00	18 04				9 00		2nd ,	{ 191	
9 50	11 69	10 05	11 16	11 01	12 27		10 11	10 01	9 50	7 60			11 75	9 00	8 54		1st half	{ 192
9 50	11 26	10 05	11 16	11 01	14 24		9 46	9 86	9 50	7 55			9 69	9 00	8 72		2nd ,	{ 192
12 20	12 64	12 91	12 51	13 08	15 10		14 29	13 01	12 00	11 67	14 76		11 22	9 00	9 67	10 37	1st half	{ 193
12 20	12 64	12 91	15 00	13 08	12 27		14 41	12 72	12 00	12 71	14 76		11 33	9 00	9 72	10 37	2nd ,	{ 193
184,785	20,469	113,612	57,809	17,666	30,319		178,634	16,224	126,958	81,604	1,954	4,684	1,535	4,300	818	1st half	{ 194	
130,661	21,000	111,223	69,120	16,417	32,277		203,433	16,384	126,526	90,060	1,172	6,035	1,787	4,767	740	2nd ,	{ 194	
208,573	20,975	214,509	72,315	40,608	37,589		417,823	32,157	124,401	175,589	469	8,542	1,602	3,904	2,051	1st half	{ 195	
168,065	14,086	183,109	90,910	23,310	36,604		312,292	21,009	189,055	158,422	503	7,782	1,689	5,508	1,088	2nd ,	{ 195	
8 88	12 88	11 24	11 50				7 50	11 96	12 77	11 50		1 45		3 06	5 46	1st half	{ 196	
8 93	18 07	11 43	11 00		11 50		8 00	10 82	12 60	11 00		1 95		3 67	5 93	2nd ,	{ 196	
9 23	15 03	9 34	15 00		12 00		18 50		16 02	17 00				2 87		1st half	{ 197	
	15 49	9 84	15 50				19 00	"	16 48	17 50				3 37		2nd ,	{ 197	
	4 32	3 27	2 94				3 26	14 31	10 35	5 67	1 51	0 09		0 21	0 71	1st half	{ 198	
1 43	2 19	2 10	1 53	"	0 31		2 22	18 45	2 36	4 19	3 69	0 01		0 50	0 51	2nd ,	{ 198	
2 13	0 84		1 04		0 25		0 01		0 63	0 14						1st half	{ 199	
	0 26		0 57						0 55	0 65				0 06		2nd ,	{ 199	

*Of local trains only.

Rolling-stock under different heads on each

Items	GAUGE			5' 6"										3' 3½"									
	NUMBER			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a) & (b)	12 (a) & (b)	13 (a) & (b)	14 (a) to (d)	15 (a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)	
	Railway			B N	B B & C I	B S	E I	G I P & I M	M	N G S	N W	O & R	A B	B & N W	B D	B G J P	B	D	D S	F B S M	H G V	J B	
<i>Engines</i>																							
1	Passenger engines	77	87	71	150	823	823	51	5	756	205	77	77	75	10	37	28	2	22	137	55	48	
2	Goods and mixed engines	214	182	115	803	823	912	56	756	205	77	77	210	10	37	251	2	22	137	55	48		
3	TOTAL ENGINES	291	219	186	95	823	266	61	756	205	77	77	210	10	37	251	2	22	137	55	48		
<i>Coaching vehicles</i>																							
4	Saloons, Royal and State	15	13	18	4	43	7	13	11	1	3	3	1	2	8	1	7	31	2	10	3	3	3
5	Saloons ordinary	9	2	2	43	1	3	5	62	18	1	1	1	5	1	1	5	1	8	5	1	8	5
6	Reserved carriages	15	9	2	43	8	3	2	2	2	2	2	1	2	31	3	2	1	1	1	1	1	1
7	Inspection carriages	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Family carriages	26	2	15	87	92	38	10	82	40	1	9	2	8	27	1	1	1	1	14	8	7	
9	First class carriages { 4 wheeled	26	2	15	87	92	38	10	82	40	1	9	2	8	27	1	1	1	1	14	8	7	
10	Bogie	2	1	2	2	12	12	12	12	12	3	3	3	3	1	1	1	1	1	10	52	5	
11	Composite first and second class	48	16	56	64	87	66	12	105	56	4	23	10	12	12	2	5	38	11	10	52	5	
12	Composite second class	23	12	12	29	29	29	2	2	4	11	11	11	11	11	11	11	11	11	11	11	11	
13	Second class	5	2	27	50	1	8	46	6	6	3	3	3	3	2	2	2	2	2	3	2	3	
14	Bogie	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	10	6	
15	Ordinary	20	16	77	144	22	79	10	94	33	33	1	10	5	40	40	40	40	40	40	40	40	
16	Second class with postal accommodation	6	29	29	71	4	124	39	32	32	10	10	10	10	10	10	10	10	10	10	10	10	
17	Intermediate class	12	16	16	16	71	4	124	39	32	32	10	10	10	10	10	10	10	10	10	10	10	
18	Ambulance	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
19	Intermediate, intermediate and third class	12	38	39	7	69	71	33	61	1	2	2	2	2	2	2	2	2	2	40	1	1	
20	Intermediate and third class	3	4	6	3	1	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
21	Intermediate and third class	26	6	29	71	4	124	39	32	32	10	10	10	10	10	10	10	10	10	10	10	10	
22	Third class carriages without brakes	157	109	109	105	51	61	75	6	360	24	125	125	125	125	125	125	125	125	125	125	125	
23	Third class carriages with brakes	80	27	105	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	
24	Third class and postal vans	15	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
25	Third class carriages	296	12	29	13	12	205	84	202	202	202	202	202	202	202	202	202	202	202	202	202	202	
26	Third class carriages with brakes	49	18	38	38	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	
27	Brake vans	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
28	Brake vans with third class	227	172	105	706	610	247	49	464	150	16	173	15	41	165	26	110	40	32	5	5	5	
29	Brake vans fitted with postal compartment	81	25	25	16	16	16	16	16	16	16	61	61	61	61	61	61	61	61	61	61	61	
30	Postal vans	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
31	Composite postal and other carriages	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
32	Prison vans	4	4	7	39	55	27	2	42	142	13	16	5	6	1	1	1	1	1	1	1	1	
33	Carriage trucks	16	18	20	75	114	56	10	142	13	13	12	12	12	12	12	12	12	12	12	12	12	
34	Horse boxes	31	26	26	21	115	40	6	61	13	13	13	13	13	13	13	13	13	13	13	13	13	
35	Luggage vans	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
36	Produce Vendors vans	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
37	Milk vans	25	21	21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	
38	Fish vans	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	
39	Store, ice and stationery vans	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
40	Miscellaneous	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
41	TOTAL COACHING VEHICLES	911	634	712	2,375	2,088	1,211	189	2,310	853	259	1,029	63	255	955	12	84	681	161	217	6	6	
<i>Goods vehicles</i>																							
42	Covered goods wagons { Ordinary	2,498	1,278	1,933	8,741	7,516	808	9	418	100	200	62	75	177	177	177	177	177	177	177	177	177	177
43	High sided wagons, bogie	1,104	1,352	1,000	3,558	1,209	717	102	5,592	2,733	1,115	5,182	263	153	2,804	4	223	2,119	320	396	396	396	396
44	High sided wagons, 4 wheeled	1,003	3	1,000	3,558	1,209	717	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	
45	Medium sided wagons, bogie	290	443	1,308	50	50	32	102	140	162	274	274	274	274	274	274	274	274	274	274	274	274	
46	Medium sided wagons, 4 wheeled	190	102	131	6,674	305	120	229	1,982	110	544	65	565	286	70	269	145	145	145	145	145	145	
47	Low sided wagons, { Ordinary	146	83	367	6,674	305	120	229	1,982	110	544	65	565	286	70	269	145	145	145	145	145	145	
48	Low sided wagons, { Military	140	100	100	1	7	21	21	21	21	4	5	2	1	6	166	166	166	166	166	166	166	
49	Cool or coke wagons	2,740	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
50	Cattle wagons	14	14	13	46	39	18	8	8	8	3	1	1	1	1	1	1	1	1	1	1	1	
51	Accident vans	14	14	13	46	39	18	8	8	8	3	1	1	1	1	1	1	1	1	1	1	1	
52	Platform wagons	6	6	5	31	24	9	10	17	8	3	1	1	1	1	1	1	1	1	1	1	1	
53	Powder vans	6	6	5	31	24	9	10	17	8	3	1	1	1	1	1	1	1	1	1	1	1	
54	Timber trucks	36	20	16	191	216	7	16	7	16	7	12	15	1	56	56	56	56	56	56	56	56	
55	Bolster trucks { Double	14	109	109	50	50	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	
56	Bolster trucks { Single	76	478	36	126	30	64	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	
57	Ballast wagons	31	20	26	54	31	45	51	51	10	50	50	50	50	50	50	50	50	50	50	50	50	
58	Travelling oil tanks	25	8	8	11	10	3	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
59	Travelling water tanks	8	8	2	3	15	12	2	15	12	15	12	15	12	15	12	15	12	15	12	15	12	
60	Travelling gas holders	11	4	7	31	57	15	2	52	17	15	19	19	19	19	19	19	19	19	19	19	19	
61	Travelling cranes	31	10	14	7	1	16	7	16	7	12	15	1	56	56	56	56	56	56	56	56	56	
62	Miscellaneous	75	82	132	339	191	98	64	670	210	19	6	83</										

DIX 22

railway at close of the calendar year 1905

3' 3½"					2' 6"												2' 0"										Item				
19	6 (d) & (e)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23	24	25	26	3 (d)	27	3 (b)	2 (n) & (o)	1 (b) & (c)	30	9 (g) & (h)	19	1 (c)	1 (d)	20 (c)	32	33	6 (f)	9 (i)	35	5 (g)	36	37	38		
M. N & R W	S C	R M	R & K	S I	S M	U C	B B L	B B L	B B C	C	E S M	G D & B	G E & P D	K S	K T & D	K R W	M B	P L L	P W L	B P	T B	T K	D L	D H	G L	H A	H S	J			
3 1	18 {	145 303	40 {	73 155	237	1 {	2 {	3	7	3	5	2	10	11	19	24	30	6	3	3	5	4	3	3	7	18	15	7	4	7	1 2
4	18	448	40	225	237	8	3	7	3	5	2	10	11	19	24	30	6	3	3	5	4	3	3	7	18	15	7	4	7	3	
3	1	7 4	3 3	9																										4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37	
3	11	42	14 3	12		1																								1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	
3	88	6	19	44		1																								18 4	
5	2	6 6	2 2	1 8	47	54	3	2		2																			5		
5	1 2	45 34	8 8	18																									3 2 2		
3	5		90	9																										3 2	
3	83	6	28	37	1																								26 3		
30	50	3																												16	
15	7																													17	
8	3																													18 19	
21	531 183	49 20	520	204	13	6	2	15	6	1	19		31	14	26	22	15	13	3	3	10	14	7	6	39	28	49	14	11	20	
5	32	2	15	1	1	1																							21		
139	10 9	12	237	19	1	1																							22		
6	10 4	283	25	84	45	3	3	3	2	1	7	5	11	16	18	14	1	3	2	3	4	3	1	3	10				24 25 26		
3	5																													27	
3	3 3	98 82	5	5	14	22	1																						28 29 30 31 32 33 34 35 36 37		
2	27																													3	
1			10	10																										2	
55	52	1,679	184	1,099	1,058	26	13	7	24	16	3	47	54	56	78	80	53	9	8	18	25	14	11	9	97	63	66	20	22	38	
29	75	471	245	75	85	25		7	56		47		150		49	10	2	2	1				12								10 42
25	48	3,662 1,020	770	1,894	3,864	6	14				38	20	79	25	10	2	57	20	30				44								39 40
6	134	10 813	57	170		5	2		15														12								41 42 43 44
7	150 953	90	20	140		9	3		96	50	30	32	14	34	4	12	3	21	6				7	10	4					45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	
1	16	5	6	4	13	45			1			110	23	1	7	2														1	
8	35 79	2	7	13	127			18																						5	
22	4	21	24	8	8			10																						100	
27	1	8	8	13	20		1																							8	
55	170	8,009	1,219	3,753	5,218	35	25	62	28	78	18	201	209	300	140	431	68	12	16	71	41	50	24	326	248	236	32	8	76	60	

WITH CLOSETS FOR FEMALES

70	9																											
203	4	51	63	17																								
273	18	51	63	17																								

ACCOMMODATION, INCLUDING THOSE FOR FEMALES

70	9	.																										
17	235	4	134	110	17	...																						
17	305	13	134	110	17																							

Number of, outlay on, and

Progressive No	GAUGE		5' 6"							
	NUMBER	1 (a)	(a) to (f)		3 (a)		4 (a) to (d)		5 (a) to (f)	
			B N	B B & C I	E B S	E I	G L P	M	N G S	
	Particulars									

ENGINES

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

1	Passenger engines	{ Number at close of 1904 Number added in 1905 Number at close of 1905	57 20 77	82 5 87	59 12 71	144 6 150			54 54 54	5 5 5
2	Goods and mixed en-	{ Number at close of 1904 Number added in 1905 Number at close of 1905	174 40	135 -3	115 31	771 771	821 3	202 10	202 56	56
3	gines									
4	Total number of locomotives on the 31st December	214	132	115	802	823	212			56
5	Number per mile of line open of all classes	0.17	0.26	0.37	0.42	0.29	0.19			0.17
6	Average mileage run by each per annum	29,835	24,031	23,321	36,719	27,029	28,950			17,963
7	(All classes)	18,47	10,402	18,456	20,271	17,852	21,602			19,063
8	Average mileage run by each per diem	22,67	18,876	20,313	22,862	20,662	23,101			18,972
9	(All classes)	57	65	64	101	74	79			49
10	Average tonnage hauled per engine, in thousands of tons	51	23	50	55	49	60			52
11	Average under repairs or renewals at any one time	64	52	56	63	56	64			52
12	Total value, in thousands of rupees	9,610	6,103	4,656	8,166	6,18	6,577			5,915
13	Average under repairs or renewals at any one time	63	35	25	109	104	55			10
14	Total value, in thousands of rupees	1,4687			1,9044	2,7796	9,474			
15	Total value per mile of line open	8,691			8,518	9,474	6,697			

COACHING STOCK

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

19	Number at close of 1904	911	632	698	2,380	2,243	1,201		190
20	Number added in 1905	911	632	14	-5	45	11		190
21	Number at close of 1905	911	634	712	2,375	2,288	1,212		188
22	1st class	0.01	0.05	0.13	0.08	0.07	0.07		0.05
23	2nd class	0.03	0.07	0.10	0.06	0.08	0.08		0.05
24	Intermediate class	0.02	0.03	0.16	0.06				
25	3rd class	0.26	0.36	0.59	0.42	0.31	0.40		0.19
26	All other classes	0.19	0.26	0.45	0.44	0.36	0.50		0.19
27	Total of all classes	0.54	0.77	1.43	1.06	0.82	0.86		0.53
28	1st class	38,147		25,570	60,329	52,274	31,081		
29	2nd class	46,210		33,642	70,450	53,087	28,987		
30	Intermediate class	69,970		90,153	76,035				
31	3rd class	15,870		37,722	67,838	56,539	36,094		
32	All other classes	35,048		23,401	33,171	33,714	31,515		
33	Total of all classes	42,890	54,730	31,902	53,422	48,062	33,563		33,580
34	Average mileage run by each per diem	116	150	87	146	132	92		106
35	Freight ton mileage per vehicle, in thousands of tons	37	48	25	50	38	30		30
36	Average under repairs or renewals at any one time	125	90	72	450	268	113		21
37	Total value, in thousands of rupees	71,16				1,18,27	46,18		
38	Total value per mile of line open	9,211				4,215	3,280		

GOODS STOCK

39	Covered wagons	3,776	2,721	3,215	8,276	7,140	2,807		161
40	Open	3,241	2,281	412	8,900	3,997	1,842		759
41	Timber trucks, including bolster trucks	50	20	126		231			10
42	All other classes	81	83	91	206	174	69		78
43	Total of all classes	7,145	5,105	3,847	17,383	11,552	4,915		1,008
44	Covered wagons		-4	100	-23	406	93		
45	Open	231		97	132	42	-80		
46	Number added in 1905	Timber trucks, including bolster trucks		4	10	9	2		
47	All other classes		231	206	113	452	3		
48	Total of all classes		3,776	2,717	3,215	8,248	7,546	2,800	161
49	Covered wagons	3,472	2,281	508	8,032	4,039	1,762		759
50	Open	50	20	125		241	185		10
51	Number at close of 1905	Timber trucks, including bolster trucks	81	87	104	215	178	71	78
52	All other classes			81	28	52	37		49
53	Total of all classes		7,378	5,105	4,053	17,495	12,004	4,918	1,008
54	Number of all classes per mile of line open	4,36	5,45	8,14	7,67	4,28	3,49		284
55	Average mileage run by each per annum	15,105	10,691	7,237	19,026	18,589	12,952		18,067
56	Average mileage run by each per diem	41	28	20	52	37	35		
57	Average tare in tons	Covered wagons	823	688	769	725	743	737	730
58	Open	831	614	743	668	685	665		700
59	Average carrying capacity in tons	Covered wagons	14,94	14,03	12,45	14,86	14,12	14,32	13,25
60	Open	16,49	14,10	15,96	14,67	14,73	13,78		16,78
61	Average load of a goods vehicle, loaded and empty, per mile	7,24	6,98	6,22	7,39	6,68	5,19		6,90
62	Freight ton mileage per vehicle, in thousands of tons	79	69	47	143	105	88		102
63	Average under repairs or renewals at any one time	216	254	261	691	556	842		56
64	Total value, in thousands of rupees	2,0549			10,0196	2,6040	1,3523		
65	Total value per mile of line open	12,161			43,926	9,281	9,604		
66	Grand total value of rolling stock, in thousands of rupees	423,52	2,38,19	1,8815	11,9240	6,5663	2,7575		54,88
67	Grand total value of rolling stock, per mile of line open	25,061	27,441	36,777	52,275	22,695	19,583		15,609

DIX 23

work done by, Rolling-stock

3' 3½"																Progressive No.
9 (a) to (f)	10 (a) & (b)	11 (a) & (b)	12 (a) & (b)	13 (a) & (b)	14 (a) to (d)	15 (a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)	19	6 (d) & (e)	2 (g) to (m)		
N W	O & R	A B	B & N W	B D	B G J F	B	D	D S	E B S M	H G V	J B	M R W	N & S C	R M		

ENGINES

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

719	202	72	205	10	37	208	4	23	133	55	48	3	4	145	1
37	3	5	205	10	37	223	2	22	137	55	48	1	6	145	3
756	205	77	205	10	37	223	2	22	137	55	48	4	12	290	5
756	205	77	240	10	37	251	2	22	137	55	48	4	13	488	7
0 19	0 16	0 09	0 15	9 06	0 06	0 10	0 40	0 28	0 19	14	0 06	0 05	0 22	0 21	8
46,132	29,435	29,435	23,660	30,715	23,119	18,372	15,634	20,973	19,035	23,807	23,129	9,118	23,943	9	
14,114	14,114	14,114	14,114	17,603	17,603	16,862	16,862	16,862	16,862	16,862	10,407	17,276	10		
26,883	28,575	23,741	23,189	28,427	16,784	23,119	18,372	15,634	20,973	19,035	23,807	23,129	9,891	19,434	11
126	56	56	56	56	56	84	51	43	71	46	65	37	65	37	12
39	65	65	65	65	65	48	51	43	57	52	65	29	47	29	13
72	78	65	63	78	46	63	51	43	8,491	3,365	4,670	63	31	53	14
7,721	7,467	3,488	4,083	2,709	4	20	7	25	25	7	7	1,163	1,392	15	
26,693	65,51	22,17	67,66	270	756	72,36	72,36	72,36	16,65	13,90	1,50	2,027	56	16	
6 728	5,202	2,994	4,361	1,765	1,661	5,460	5,460	5,460	5,598	1,667	2,027	19	17	19	

COACHING STOCK

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

2,360	852	239	912	63	255	993	12	82	679	164	205	46	1,684	19	
30	1	20	87	8	8	8	2	2	2	12	12	6	—5	20	
2,399	853	259	1,029	63	255	985	12	84	681	164	217	55	52	1,679	21
0 04	0 03	0 03	0 05	0 05	0 05	0 06	0 05	0 05	0 09	0 07	0 04	0 07	0 03	22	22
0 04	0 05	0 02	0 04	0 04	0 04	0 07	0 04	0 04	0 06	0 04	0 02	0 02	0 02	23	23
0 04	0 05	0 01	0 01	0 01	0 03	0 03	0 03	0 03	0 10	0 08	0 02	0 02	0 02	24	24
0 24	0 29	0 13	0 40	0 31	0 30	0 30	0 48	0 48	0 18	0 12	0 26	0 26	0 26	25	25
0 24	0 20	0 15	0 14	0 18	0 22	0 22	0 48	0 48	0 25	0 13	0 06	0 13	0 13	26	26
0 60	0 67	0 34	0 71	0 41	0 56	0 74	2 40	1 09	0 93	0 42	0 26	0 75	0 59	0 82	27
5,380	36,199	49,225	25,640	29,716	29,716	29,716	29,716	29,716	29,716	29,716	29,716	13,127	22,457	28	28
3,623	35,466	65,373	75,285	75,285	75,285	75,285	75,285	75,285	75,285	75,285	75,285	15,782	31		
3,289	34,779	59,939	88,463	88,463	88,463	88,463	88,463	88,463	88,463	88,463	88,463	10,313	32		
20,203	20,538	13,814	29,525	29,525	29,525	29,525	29,525	29,525	29,525	29,525	29,525	13,777	43,599	33	
14,384	46,829	30,470	48,657	30,264	33,895	30,264	33,895	30,264	33,895	45,831	53,209	38	121	34	
143	128	83	133	83	21	26	22	22	31	34	146	30	35		
41	38	23	32	14	92	14	103	103	10	13	13	19	3	124	36
239	55	39	68	16	785	5,07	8,77	8,77	2,241	2,241	2,241	2,241	2,241	37	38
1,6148	23,23	3,002	3,002	1,723	3,885	3,885	3,885	3,885	3,885	3,885	3,885	3,885	3,885	3,885	38

GOODS STOCK

8,676	4,884	1,215	5,711	263	298	3,530	4	223	2,848	403	602	79	4,619	39
2,917	412	69	705	903	814	564	4	223	2,848	403	602	56	2,677	40
320	616	70	279	12	22	400	50	143	20	20	20	8	79	41
253	47	85	35	4	23	152	2	50	11	36	36	102	102	42
11,566	5,877	1,812	6,025	918	1,018	4,985	8	1,089	3,605	816	933	29	142	43
56	10	243	243	—3	160	—14	2	109	—13	—29	—29	25	27	45
56	2	2	2	2	—2	—2	2	8	1	8	1	5	27	46
8,132	4,884	1,225	5,054	263	298	3,690	4	223	2,834	403	602	29	5,153	49
2,917	439	66	705	903	814	551	6	223	2,834	403	602	25	83	50
320	646	62	279	14	22	398	50	114	20	20	20	8	79	51
253	49	87	37	5	23	164	2	58	12	44	44	1	100	52
11,622	5,579	1,813	6,270	348	1,048	5,155	10	1,089	3,557	817	841	55	170	53
2,93	437	2,34	4,01	2,27	2,30	3,84	2,00	1,105	4,85	2,09	1,13	0 75	2,12	391
20,354	14,896	7,577	11,274	5,891	11,515	—	—	12,635	12,635	12,635	12,635	8,599	16,030	55
56	41	21	31	15	32	440	4	40	4,29	3,90	3,90	9	44	56
7 51	7 22	4 93	3 76	3 72	3 78	4 56	3 22	4 04	4 40	4 29	3 90	8 02	4 07	57
7 12	3 28	3 13	3 78	3 13	3 78	4 56	3 22	4 04	3 22	4 73	4 73	6 51	4 30	58
16 60	12 40	10 33	9 74	7 15	8 82	8 68	7 20	11 00	9 95	10 93	9 51	16 85	9 59	59
13 87	6 90	9 74	8 81	2 73	3 30	4 10	7 20	11 00	12 85	11 00	12 85	14 90	12 41	60
7 62	5 21	4 03	3 81	17	40	460	45	212	34	49	59	4 21	4 45	61
157	52	34	36	16	44	41	212	21	19	21	19	14	71	62
344	101	147	242	17	40	460	212	21	19	19	19	6	215	63
3,02 61	1,67 18	36,10	1,42 49	933	12 53	89,93	2,751	6 714	1,23,33	27 17	2,83	3,824	14,50	64
9,273	13,275	4,875	9,183	6,099	2,751	6 714	2,751	6 714	3,857	3,857	3,857	3,857	17,683	65
7,34,02	2,92,69	80 50	2,10,15	12 03	27 94	2 14 41	Information not available	23 94	1,23,33	38 55	41,07	4,831	14,50	66
18,503	18,503	10,873	13,541	7,863	6,185	16,001	Information not available	30,885	16,825	9,859	4,930	5,851	17,683	67

Number of, outlay on, and

Progressive No.	GAUGE	3' 6 1/2"—concl'd					2' 6'						
		20(a) & (b)	21 (a) to (f)	22 (a) to (j)	23	24	25	26	3 (d)	27	3 (b)	2 (n) & (o)	
	Particulars	R & K	S I	S M	U C	B B L	B L	B B	C B	C	E B S M	G D & E	

ENGINES

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

1	Passenger engines	Number at close of 1904		73		1							
2		Number added in 1905		73		1	"						
3		Number at close of 1905		40	145	238	2		5	3	5		
4		Number at close of 1904			10	-1			2				
5	Goods and mixed engines	Number added in 1905		40	155	237	2	3	7	3	5	2	10
6		Number at close of 1905			228	237	3	3	7	3	5	2	11
7	Total number of locomotives on the 31st December			40	228							2	10
8	Number per mile of line open of all classes			0.14	0.17	0.14	0.04	0.12	0.25	0.16	0.15	0.17	0.29
9	Average mileage run by each Goods per annum			7,141	30,968	19,662							14,759
10		All classes		8,713	15,320	17,794							10,424
11	Average mileage run by each Goods per diem			20,186	23,160	20,196	10,029	1,358	23,567	9,139	17,953	6,900	11,146
12		All classes			20	85	54		37	70	25	19	28
13	Average mileage run by each Goods per diem				21	41	48						40
14		All classes			55	61	56						28
15	Total mileage hauled per engine, in thousands of tons			2,947	3,729	3,953	3,720		70			19	30
16	Average under repairs or renewals at any one time				9	23	38						2
17	Total value, in thousands of rupees					59.71	.05	70					1.41
18	Total value per mile of line open					8,466	1,334	2,941					1,004

COACHING STOCK

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

19	Number at close of 1904	180	1,063	1,053	26		7	21	16	3	47	51
20	Number added in 1905	4	96									
21	Number at close of 1905	184	1,099	1,053	26	13	7	24	16	3	47	54
22	1st class	0.03	0.06	0.05	0.03				0.06	0.03	0.11	0.06
23	2nd class	0.01	0.05	0.04	0.03				0.03		0.06	
24	Number per mile of line open	Intermediate class	0.03							0.10	0.17	
25		3rd class	0.32	0.52	0.32	0.22			0.25	0.09	0.08	0.26
26		All other classes	0.16	0.18	0.20	0.06			0.04	0.08	0.36	0.11
27	Total of all classes	0.63	0.81	0.61	0.37	0.50		0.32	0.48	0.25	1.64	0.43
28	1st class		31,942									
29	2nd class		41,758									
30	Average mileage run by each per annum	Intermediate class										
31	3rd class		48,327									
32	All other classes		84,637									
33	Total of all classes	34,916	43,613	29,448	31,505							
34	Average mileage run by each per diem	96	119	80	86							
35	Freight ton mileage per vehicle, in thousands of tons	20	38	29	28							
36	Average under repairs or renewals at any one time	20	67	51	2							
37	Total value, in thousands of rupees				110							6
38	Total value per mile of line open				1,734							1.29
												975

GOODS STOCK

39	Covered wagons	948	2,125	3,334	25		7	14	56	47	55	
40	Open	83	1,347	1,054	10		15	2	9	38	55	
41	Number at close of 1904	76	71	267			39		5		152	
42	Timber trucks, including bolster trucks											
43	All other classes	15	6	206			1		12		2	
44	Total of all classes	1,122	3,549	4,861	35		62	28	70	201	209	
45	Covered wagons	67	156	366								
46	Open	30	46	-10			19					
47	Number added in 1905											
48	Timber trucks, including bolster trucks											
49	All other classes	97	2	1								
50	Total of all classes	1,015	2,281	3,700	25	6	7	14	56	47	55	
51	Covered wagons	113	1,393	1,044	10	19	15	2	9	32	152	
52	Open	76	71	267			39		13	9	-	
53	Number at close of 1905											
54	All other classes	15	8	207			1		12		2	
55	Total of all classes	1,219	3,753	5,218	35	25	62	28	78	18	201	
56	Average mileage run by each per annum	419	277	303	0.50	0.98	221	151	232	1.54	5.86	
57	Average mileage run by each per diem	7,189	11,468	11,851	12,530							
58	Average rate in tons	19	31	31	34							
59	Covered wagons	9.96	4.44	4.02	4.02			5.90	2.75	3.32	2.70	
60	Open	3.46	3.73	3.28	3.22			5.35	2.50	2.15	2.25	
61	Average carrying capacity in tons	11.30	7.87	7.76	7.40			14.10	6.00	3.79	4.13	
62	Open	10.39	7.26	6.97	6.29			14.65	6.00	5.00	5.25	
63	Average load of a goods vehicle, loaded and empty, per mile	4.27	3.68	3.50	2.17							
64	Freight ton mileage per vehicle, in thousands of tons	26	46	37	23							
65	Average under repairs or renewals at any one time	52	207	112			4	1,71	5	8	15	
66	Total value, in thousands of rupees			1,08,60	58	1,28		9,233	..	723		1,45
67	Total value per mile of line open			6,804	845	4,931						1,101
	Grand total value of rolling stock, in thousands of rupees	41,35	1,56,00	1,68,81	2,72	2,04		2,41	1,96	20	Included with E B S	4,18
	Grand total value of rolling stock per mile of line open	13,692	11,830	9,751	3,942	7,868	Information not available	13,018	5,765	1,667	Ry S' 3 1/2 gauge	3,170

DIX 23—concl'd

work done by Rolling-stock

2' 6"												2' 3"						Progressive No
1 (b) & (e)	30	9 (g) & (h)	19	1 (c)	1 (d)	20 (e)	32	33	6 (f)	9 (i)	35	5 (g)	36	37	38			
J G E & E D	K S	K K T & N D	M R W	M B	P L L	P W L	B P	T B	T K	D L	D H	G L	H A	H S	J			

ENGINES

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

17	13	27	7	3	5	4	3	3	7	18	15	7	4	7	1	12
2	11	3	1	3	5	4	3	3	7	18	15	7	4	7	3	13
19	24	30	6	3	5	4	3	3	7	18	15	7	4	7	5	14
19	24	30	6	3	5	4	3	3	7	18	15	7	4	7	7	16
0.07	0.40	0.23	0.37	0.09	0.12	0.13	0.12	0.15	0.12	0.34	0.03	0.19	0.20	0.23	0.23	8
"									1.13							9
18,099	7,512	12,964	9,989	18,174	6,559	12,594	23,462			18,995	9,841	14,775	8,766			10
49	21	85	27	36	18	35	64			38	27	40	24			11
2,510	517	1	708	487	1	1	1	1		2	2	1.65	65			12
9	655	781	69	76	68	2,057				3.22		4,460	3,280			13
11,027	5,535	2,129	3,081							6,323						14

COACHING STOCK

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

50	78	78	54	8	18	25	14	9	91	59	56	20	19	19	19	
58	78	80	53	9	8	18	25	11	87	63	66	20	22	20	20	
0.02	0.30	0.05	0.06	0.01	0.05	0.07	0.10	9	646	63	66			21	21	
0.01	0.27	0.03	0.03	0.01	0.05	0.04	0.08	0.08	0.56					22	22	
0.14	0.44	0.30	0.02	0.03	0.14	0.33	0.45	0.45	0.24	0.62				23	23	
0.02	0.30	0.20	0.06	0.03	0.03	0.11	0.15	0.12	0.06	0.06				24	24	
0.19	1.31	0.61	3.31	0.27	0.32	0.46	0.75	0.70	1.46	1.90	0.25	1.78	1.00	0.73	25	
23,352	4,711	5,031	5,028	6,975											26	26
40,817	6,617	6,617	18,452												27	27
56,315	10,624	11,710	5,860												28	28
44,85	10,624	11,710	5,860												29	29
36,787	9,176	10,572													30	30
41,784	7,778	8,640	11,453												31	31
114	21	21	31												32	32
20	5	6	10												33	33
3.49	7	5	1	31		1	69	2,061							34	34
5,877	1,85	1,405	1,245												35	35

GOODS STOCK

170	70	84	20	3	58	20	30	37	80	14	4	42	39		
80	60	335	47	14	2	15	18	182	55	8	4	24	40		
								6						41	
250	130	23	1	4	16	71	35	50	326	19	101	52	9	42	
25	23			8			6	12	326	244	101	10	75	43	
2	50	-12	20	12	2	58	20	30	44	80	14	4	42	44	
170	80	-11	47	4	8	14	21	18	179	55	8	4	29	49	
105	60	84	20	2	2	18	2	12	6	6	8	4	28	50	
23		336	47											51	
2	300	140	431	12	16	71	41	50	326	19	101	10	5	52	
105	236	327	425	0.37	0.65	1.82	1.23	2.50	0.96	248	236	82	8	76	53
11,538	4,292	7,311	4,474	20	12	1.23		0.53	4.86	0.94	0.86	0.40	2.58	54	
32	12													55	
744	450	500	693	3.16	2.75									56	
558	312	133	506	4.06	2.15									57	
10.95	625	864	9.00	9.04	4.81	5.00	4.00							58	
10.87	348	11.00	7.39			5.00	4.00							59	
3.95	2.34		7.83	3.04										60	
45	10		57	14	5	61								61	
2.77	10	4.83	54	41	1,689	1,689	1,689			3.62	3.26	1.03	..	62	
4,655	3,660									7,102	8,759	5,224		64	
20,98	12,81	13,99	3,56	1,23	1,43	1,42	1,98	1,60	2,40	Included with North Western State railway	6,81	5,56	4,91	1,68	66
7,361	22,250	10,598	20,941	3,844	6,015	3,641	6,005	8,021	9,600	13,412	2,224	13,270	8,040	6,767	67

APPENDIX 24

Rolling-stock fitted with automatic brakes at close of 1905

NUMBER	Main head	Sub head	Gauge	RAILWAY SYSTEM (Vide Appendix 1)	LOCOMOTIVES			COACHING VEHICLES INCLUDING ALL BRAKE VANS			GOODS VEHICLES, EXCLUDING CRANES				
					Fitted	Not fitted	Proportion per cent of fitted to total	Braked	Piped	Not fitted	Proportion per cent of fitted to total	Braked	Piped	Not fitted	
1	(a)		5'	Bengal Nagpur	176	115	60 48	715	13	184	79 80	1,217	13	6,138	16 69
2	(a) to (f)		5'	Bombay, Baroda and Central India	181	38	82 65	496	4	134	78 86	2	49	5,050	1 00
3	(a)		5'	Eastern Bengal State	129	57	69 35	502	44	166	76 69		13	4,033	0 32
4			5'	East Indian	457	465	51 16	1,522	92	761	67 95	235	78	17,151	1 79
5	(a) to (f)		5'	Great Indian Peninsula, Indian Midland	491	332	59 66	1,721	11	556	75 70		165	11,782	1 38
6	(a) to (c)		5'	Madras	152	114	57 14	985	20	237	78 80	164	15	4,721	3 65
8	(a) & (b)		5'	Nizam's Guaranteed State		61		55	3	180	30 65			1,006	
9	(a) to (f)		5'	North Western State	705	51	93 25	2,036	90	223	90 70	1,046	103	10,421	9 93
10	(a) & (b)		5'	Oudh and Rohilkhand State	123	83	59 51	714	49	90	89 45	29	10	5,523	0 70
11			5'	Assam Bengal	68	9	88 31	245	2	12	95 37	102	7	1,659	6 06
12			5'	Bengal and North Western	65	175	27 08	362	2	685	35 87			6,251	
13			5'	Bengal Dooars		10					63			345	
14			5'	Bhavnagar Gondal Junagadh Porbandar		37					255			1,046	
15			5'	Burma	144	107	57 37	421	31	530	46 29	155	9	4,961	3 20
16			5'	Deoghar		2					12			10	
17			5'	Dibrugarh Sadiya		22					84			1,068	
3	(b) & (c)		5'	Eastern Bengal State	106	31	77 37	440	42	199	70 78		2	3,542	0 06
8	(c)		5'	Hyderabad Godavari Valley		55		3		161	1 83			815	
18			5'	Jodhpur Bikaner		46			1	216	0 46			941	
19			5'	Morvi		4					55			55	
6	(d) & (e)		5'	Nilgiri and Shoranur Cochin	6	12	33 33	12	1	39	25 00	21		119	12 35
2	(g) to (m)		5'	Rajputana Malwa	45	403	10 04	97	85	1,547	7 86			7,982	
20	(a) & (b)		5'	Rohilkund and Kumaon	10	30	25 00				184			1,211	
21			5'	Sonth Indian	48	180	21 05	210	2	887	19 22			3,745	
22			5'	Southern Mahratta	42	195	17 72	106	3	914	10 85			5,197	
23			5'	Udaipur Chitor		3					26			85	
24			5'	Barasat Basirhat Light		3					13			25	
25			5'	Baras Light		7					7			61	
26			5'	Bukharpore Behar Light		3					24			23	
3	(d)		5'	Cooch Behar including 2 6" gauge branches of Eastern Bengal State Railway Cutch		15					63			279	
27			5'	Gackwar Dabhoi and Rajpipla		2					3			18	
2	(n) & (o)		5'	Jubbulpore Gondia, Mourbhambani, Parbhimedhi Light and Raigarh Dhamtari	12	18	48 00	81		39	46 57	223		209	
1	(b) to (e)		5'	Kalla Simla	24		100 00	78			100 00	79	61	67 99	
30	(g) & (h)		5'	Khushalgarh Kohat-Thal and Nowshera Dargai		30					80			431	
19			5'	Morvi		6					53			68	
20	(c)		5'	Powayan Light		5					18			71	
32			5'	Tarkeshwar Magra Light		4					25			41	
33			5'	Tezapore Balipura Light		3					14			50	
6	(f)		5'	Tirapattur-Krishnagiri	3		100 00				11			24	
9	(i)		5'	Dandot Light		7					19			926	
35			5'	Darjeeling Himalayan		18					97			248	
5	(g)		5'	Gwalior Light		15					63			286	
36			5'	Howrah Amta Light		7					66			32	
37			5'	Hovrah Sheakhala Light		4					20			8	
38			5'	Jorhat State		7					22			76	
				Total	3,016	2,799	51 87	10,754	447	9,061	55 28	3,273	525	107,226	3 42

APPENDIX 25

Rolling-stock lighted by gas and electricity at close of 1905

NUMBER		Gauge	RAILWAY SYSTEM (Vide Appendix I)	Number of coaching vehicles fitted for lighting with			Number of coaching vehicles not fitted	Proportion per cent of fitted to total	REMARKS
Main head	Sub head			Gas	Elec tricity	Total			
1	(a)		Bengal Nagpur	665	1	666	194	77 44	
2	(a) to (f)		Bombay, Baroda and Central India	405	2	407	7	98 31	
3	(a)		Eastern Bengal State	484	1	485	220	68 79	
4			East Indian	1,876	3	1,879	246	81 86	
5	(a) to (f)	5' 6"	Great Indian Peninsula	1,368	29	1,397	80	94 58	
			Indian Midland						
6	(a) to (c)		Madras	1,001		1,001	184	84 47	
8	(a) & (b)		Nizam's Guaranteed State	119		119	61	66 11	
9	(a) to (f)		North Western State	1,851		1,851	285	86 66	
10	(a) & (b)		Oudh and Rohilkhand State	633	1	634	169	80 19	
11			Assam Bengal	227		227	6	97 42	
12			Bengal and North Western				1,029		
13			Bengal Dooars				63		
14			Bhavnagar Gondal Junagadh Porbandar				255		
15			Burma		20	20	896	2 18	
16			Deoghar				12		
17			Dibrugarh				84		
3	(b) & (c)	3' 3 3/8"	Eastern Bengal State	485		485	191	71 75	
8	(c)		Hyderabad Godavari Valley	114		114	50	71 26	
18			Jodhpur Bikaner		80	80	130	38 10	
19			Morvi				55		
6	(d) & (e)		Nalgiri and Shoranur Cochin				52		
2	(g) to (m)		Papputana Malwa		340	340	1,306	20 66	
20	(a) & (b)		Rohilkund and Kumaon				184		
21			South Indian		99	99	881	10 10	
22			Southern Mahratta	970		970	55	94 63	
23			Udaipur Chitor				26		
24			Barnet Basarhat Light				13		
25			Barsi Light				7		
26			Bulhatiarpore Behar Light				24		
3	(d)		Cooch Behar including 2' 6' gauge branches of Eastern Bengal State Railway				63		
27			Cutch				3		
2	(n) & (o)		Gaekwar's Dabhoi and Rajpipla				54		
1	(b) to (e)	2' 6"	Jubbulpore Gondia, Mourbanj, Parlakimedi Light and Raipur Dhamtari	34		34	89	46 58	
30			Kalka Simla		72	72	6	92 80	
9	(g) & (h)		Khushalgarh Kobat Thal and Novshera Durgai				80		
19			Morvi				53		
20	(c)		Powayan Light				18		
32			Tarareshwar Magra Light				25		
33			Tezapore-Balipara Light				14		
6	(f)		Tirupattur Krishnagiri				11		
9	(i)		Dandot Light				9		
35			Darjeeling Himalayan				97		
5	(g)	2' 0"	Gwalior Light				63		
36			Howrah Amta Light				66		
37			Howrah Shekhala Light				20		
38			Jorhat State				22		
			TOTAL	9,732	648	10,430	7,408	58 47	

APPENDIX 26

Railways on which points and signals were interlocked and on which block instruments were used for train signalling at close of 1905

NUMBER		Gauge	RAILWAY SYSTEM (Vide Appendix 1)	Total number of stations on rail-way	STATIONS AT WHICH POINTS AND SIGNALS WERE INTERLOCKED		STATIONS AT WHICH BLOCK INSTRUMENTS WERE USED FOR TRAIN SIGNALLING	
Main head	Sub-head				No	Name of system of interlocking	No	Name of block instrument
1	(a)		Bengal Nagpur	233	93	90 Last and Morse's 3 Experimental	16	4 Webb and Thomson's 12 Theobald's Train Key
2	(a) to (f)		Bombay, Baroda and Central India	132	30	22 Mackenzie and Holland's 8 Experimental	82	58 Preece's single wire semaphore Does not give out a token or tablet 24 Experimental
3	(a)		Eastern Bengal State	129	33	22 Ordinary double line interlocking 11 Experimental	22	Pryce and Ferreira's Token not necessary
4			East Indian	378	179	93 English system 80 Dutton's 1 Experimental	126	75 Pryce and Ferreira's Token not necessary 37 Tyer's Tablet 14 Experimental
5	(a) & (b)	5' 6"	Great Indian Peninsula	260	64	48 English system 18 Last and Morse's 3 Experimental	260	205 Preece's Does not give out a token or tablet. At some of these stations two kinds of instruments are used 65 Neal's
5	(c) to (f)		Indian Midland	148	17	11 Wrench's 5 English system 1 Experimental	31	Preece's Does not give out a token or tablet
6	(a) to (c)		Madras	304	58	37 Last and Morse's	211	106 Winter's Block with starting semaphores Does not give out a token or tablet 20 Winter's Block without starting semaphores Does not give out a token or tablet
8	(a) & (b)		Nizam's Guaranteed State	45	1	21 Experimental Dutton's 267 Last and Morse's		85 Theobald's Train Key
9	(a) to (f)		North Western State	578	318	28 Tapet 29 Key locking 3 Experimental	32	6 Tyer's Tablet 26 Tyer's double line block instruments
10			Oudh and Rohilkhand State	182	110	103 Last and Morse's 7 Experimental	2	1 Tyer's Tablet 1 Neal's Patent Voucher
11	.		Assam Bengal	117				
12			Bengal and North Western	276				
13			Bengal Dooars	29				
14	"		Bhavnagar Gondal Junagadh Porbandar	64	2	Experimental	6	2 Tyer's Tablet 2 Neal's 2 Theobald's Train Key
15			Burma	230	16	12 Last and Morse's 4 Experimental		
16			Deoghar	1				
17			Dibrugarh	18				
3	(b) & (c)		Eastern Bengal State	138	20	19 Last and Morse's 1 Experimental Last and Morse's	20	Tyer's Tablet.
8	(c)		Hyderabad Godavari Valley	47	41			
18			Jodhpur Bikaner	85				
19	.	3' 3"	Morvi	12				
6	(d) & (e)		Nilgiri and Shoranur-Cochin	29			12	6 Winter's Block with starting semaphores Does not give out a token or tablet 6 Theobald's Train Key
2	(g) to (m)		Rajputana Malwa	291	99	87 Sydney Jones' 12 Experimental	20	17 Tyer's Tablet 3 Experimental
20	(a) & (b)		Rohilkund and Kumaon	47	1	Experimental		
21			South Indian	236	33	25 Last and Morse's 5 Dutton's 3 Experimental	24	Winter's Block and Ticket issuing
22	"		Southern Mahratta	243			104	100 Winter's Does not give out a token or tablet 4 Theobald's Train Key
23			Udaipur Chitor	7				
24			Bareet Basirhat Light	11				
25			Barsi Light	5				
26			Bulharpore Behar Light	7				
3	(d)		Cooch Behar	9				
27			Cutch	2				
2	(n) & (o)		Gangwar's Dabholi and Raopuria	29	1	Country made		
1	(b) to (e)		Jubbulpore-Gondia, Mourban, Parlakimedi Light and Raipur Dhantari	49				
9	(g) & (h)	2' 6"	Khushalgarh Kohat Thal and Nowshera Darzi	21				
30			Kalla Simla	20				
20	(c)		Powayan Light	8				
32			Tarakeshwar Magra Light	17				
33			Tezpore-Balipara Light	8				
6	(f)		Tirapattur Krishnaguri	6				
35			Darjeeling Himalayan	11				
5	(g)	2' 0"	Gwahor Light	23				
36			Howrah Amta Light	18				
37			Howrah Shekhala Light	12				
38			Jorhat	8				
Total				4,523	1,116			968

APPENDIX 27.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905

Number	Ry system, vide App I	Calendar year	SOURCES OF SUPPLY		DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON									CONSUMPTION IN LBS (Calculated on the actual quantity of coal and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood)				REMARKS		
			NAME (The name of the sources of supply is for coal only Wood was supplied from various sources)	AVERAGE DISTANCE CARRIED IN MILES (The distance is reckoned either from the sources of supply or from the places of delivery to several storages)		FOREIGN COAL			INDIAN COAL			WOOD			Per train mile	Per engine mile	Per 1,000 freight ton miles	Per 1,000 gross ton miles		
				Cost per ton	Quantity in tons	Including freight	Excluding freight	Cost per ton	Quantity in tons	Including freight	Excluding freight	Cost per ton	Quantity in tons	Including freight	Excluding freight					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
B C	[1901] [1902] [1903] [1904] [1905]	Bengal	[Amalgamated with the Eastern Bengal State railway]	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	52.05	41.75	1,283.43	172.62		
B N (a)	[1901] [1902] [1903] [1904] [1905]	Bengal and Umaria	{ 331 321 288 228 219	162 162 162 162	95,231 113,180 134,066 149,725 177,960	6.26 4.29 3.71 5.52 5.16	3.00 3.00 2.43 2.58 2.34	103	5.60	5.60	57.93 59.81 65.95 57.93 71.81	51.92 53.37 77.546 75.478 61.15	826.90 759.48 775.46 754.78 618.19	178.95 178.58 199.42 200.80 199.34						
J G E (b)	[1901] [1902] [1903] [1904] [1905]	Bengal	{ 603 617 620	191 3,165 5,700	7.68 10.31 10.18	2.12 2.46 2.28	-	-	-	64.33 56.20 54.33	60.52 47.63 45.53	1,135.88 1,178.53 983.05	393.30 344.98 300.75							
M B (c)	1905	Bengal	188	-	417	4.69	2.28	-	-	-	24.01	23.63	1,265.94	449.05						
P L L (d)	[1901] [1902] [1903] [1904] [1905]	Bengal	{ 603 567 495 495	350 362 361 351	7.96 7.40 8.70 8.52	2.37 2.12 2.46 2.28	-	-	-	41.56 44.43 44.19 43.34	39.06 42.06 42.38 10.30	5,545.54 3,873.00 2,685.67	664.51 627.00 512.19							
R D (e)	[1901] [1902] [1903] [1904] [1905]	Bengal	{ 481 480 463 442 442	599 554 688 785 856	8.06 6.41 6.07 8.12 7.93	2.38 2.37 2.12 2.46 2.23	-	-	-	22.70 23.31 26.61 29.43 30.89	22.11 22.75 26.35 29.03 30.41	1,282.31 1,266.15 1,486.37 1,168.36 1,091.26	367.28 378.98 437.75 403.60 369.67							
B B & C I (f)	[1901] [1902] [1903] [1904] [1905]	England, Bengal and Singareni	{ 138 128 121 129 148	5 27.00 10,384 13,545 12,621	77,916 65,559 63,172 67,666 75,769	16.13 15.93 14.56 12.92 12.53	2,019 2,063 2,226 2,344 2,494	3.80 3.27 3.00 3.00 3.06	-	60.26 58.11 57.58 59.27 57.81	51.16 48.99 48.16 49.22 48.43	524.61 543.60 514.46 536.53 514.00	155.57 154.30 148.09 152.36 149.83							
G D & R (g) & (o)	[1901] [1902] [1903] [1904] [1905]	England and Bengal	{ -	-	1,245 1,093 1,417 1,240 1,384	-	-	54 24 70 83 207	-	25.65 24.18 25.50 25.39 27.05	25.48 24.02 25.17 25.12 26.90	-								
E B S (a)	[1901] [1902] [1903] [1904] [1905]	Bengal	{ 186 167 186 182 180	-	65,477 67,891 69,266 63,974 90,396	5.93 6.10 5.65 5.02 4.82	2.80 3.48 2.81 2.39 2.48	-	-	71.66 69.86 72.02 72.78 73.38	51.09 49.57 50.20 49.11 53.59	1,008.11 859.42 919.95 863.33 975.41	226.09 209.53 212.73 206.85 232.28							
E B S (b) and (c)	[1901] [1902] [1903] [1904] [1905]	Bengal and Assam	{ 303 291 280 285 281	-	40,271 42,898 47,247 49,391 48,662	8.71 9.82 6.52 6.09 6.06	3.69 5.14 3.78 3.75 4.32	-	-	39.75 42.62 44.07 45.84 46.88	32.18 31.31 35.65 36.77 36.52	920.93 898.88 841.98 872.27 805.30	229.47 235.43 239.41 231.02 227.73							
C B (d)	[1901] [1902] [1903] [1904] [1905]	Bengal and Assam	{ 407 85 72 75	-	785 980 1,271 587	10.69 9.86 9.45 9.77	4.18 9.04 9.40 9.11	-	-	29.95 23.76 76.86 17.53	19.13 21.50 30.57 44.61	-								
E C	1901	Transferred partly to the Bengal	Nagpur and partly to the Madras railways	474,034 481,217 476,881 468,271 505,916	4.00 4.18 4.19 4.05 4.01	1.91 1.96 2.00 1.97 1.92	-	-	-	63.05 63.92 65.75 66.47 69.75	50.47 50.76 51.97 51.66 52.07	470.61 503.10 457.12 406.33 431.67	164.71 161.42 151.16 137.59 145.77							
F I	[1901] [1902] [1903] [1904] [1905]	Bengal and Umaria	{ 245 260 256 241 245	-	-	-	-	-	-	-	-	-	-	-	-	-				

APPENDIX 27—contd

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905—contd.

Number	Ry. system, vide App I	Calen dar year	SOURCES OF SUPPLY		DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON										CONSUMPTION IN LBS							
			NAME (The name of the sources of supply is for coal only. Wood was supplied from various sources)	AVERAGE DISTANCE CARRIED IN MILES (The distance is reckoned either from the sources of supply or from the places of delivery to several storages)	FOREIGN COAL			INDIAN COAL			WOOD			(Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood)				REMARKS				
					FOREIGN COAL		Cost per ton	INDIAN COAL		Cost per ton	WOOD		Cost per ton	Per train mile	Per engine mile	Per 1,000 freight ton miles	Per 1,000 gross ton miles					
					Quant ty in tons	In clud ing freight		Quant ty in tons	In clud ing freight		Quant ty in tons	In clud ing freight										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
5 (a) (c)	G I P	1901 1902 1903 1904 1905	England Bengal Singapore Umaria Nerbudda and Warora	318 294 327 304 304	Rs 303 329	Rs 12 87 18 54 16 64	Rs 8 57 8 38 8 17 8 99 9 20	Rs 6 18 5 98 6 07 6 45 7 87	Rs 4 849 4 515 4 439 5 117 4 896	Rs 2 63 3 81 3 91 3 58 3 51	Rs 66 60 66 73 68 43 68 91 67 43	Rs 57 86 58 11 59 65 60 50 59 09	Rs 764 21 719 69 708 03 776 00 755 75	Rs 198 21 193 63 206 92 205 09 200 52								
5 (g)	G L	1901 1902 1903 1904 1905	Bengal and Moh pani	750 535 535																		
6 (a) (c)	M L	1901 1903 1903 1904 1905	England, Bengal and Singa rem	434 313 333 191 352	15 14 27 38 24	12 50 32 90 4	91 481 97 516 112 647 130 755 156 812	13 32 10 32 10 29 10 82 10 23	4 01 5 25 5 12 8 95 5 15	94 503 108 529 96 577 59 148 42 059	5 74 4 97 4 97 4 81 4 18	5 42 4 68 4 42 4 01 3 98	63 66 68 64 73 02 70 78 71 95	51 19 51 05 60 89 58 69 63 35	882 19 974 72 1,069 81 946 28 874 82	212 76 227 03 230 46 221 48 221 69						
6 (d) (f)	N S C & T K	1901 1902 1903 1904 1905	England, Bengal and Singa rem	328 241 688 148 207	16 18 20 00 21 21	1,510 31 67 1,662 2,430 2,547	38 03 *27 57 *29 17 *22 51 21 58	5 11 13 60 14 31 12 48	18 45 5 12 5 12 5 15 5 15	385 3 315 5,869 5 116 4,502	4 00 1 43 1 61 4 48 1 12	88 82 72 33 61 42 61 30 60 50	85 85 66 69 54 08 54 18 52 45	1,410 33 4,399 75 2,409 43 2,605 63 2,637 03	1,802 09 654 46 369 85 423 19 423 75	* Including sea freight from England						
8 (a)& (b)	N G S	1901 1902 1903 1904 1905	Singapore	102 103 192 192 84																		
8 (c)	H G V	1901 1902 1903 1904 1905	Singapore	321 341 347 347 291																		
9 (a) (f)	N W F	1901 1902 1903 1904 1905	England Bengal Dandot Bhag wala and Khost	1833 1833 1833 1833 1833		11,071 7,206 3,736 19 00 ††2,373	22 27 20 61 215 279 255 111 ††	194,134 121,323 216,097 163,151 (a)	†16 81 8 †† †† ††	5 38 || ** †† (b)	180,521 122,323 205 76,336	5 21 5 31 5 35	51 24 52 84 52 72 57 16 50 82	41 05 46 36 46 47 50 12 52 16	520 93 593 81 557 78 481 27 511 06	149 71 160 45 155 74 156 91 172 02						
9 (g)& (h)	K T & N D III	1901 1902 1903 1904 1905	Bengal and Dandot																			
10 (a)& (b)	O E R	1901 1902 1903 1904 1905	Bengal	528 674 595 603 603																		
11	A B	1901 1902 1903 1904 1905	Bengal and Assam	106 105 120 120 156																		
12	B & N W.	1901 1902 1903 1904 1905	Bengal	228 252 250 248 250	27 25 25 18 18																	

† Includes Nowshera Dungen railway during the first half of 1901

‡ Of Bengal coal only

§ Bengal coal via Kinnar Rs 13 62 and via Ghazabadi Rs 15 41

|| Bengal coal from Rs 2 37 to Rs 3 00 and Khost and Dandot coal between Rs 7 and Rs 13 and Khost patent fuel at Rs 20

** Bengal coal from Rs 2 06 to Rs 3 50 and Khost and Dandot coal between Rs 7 and Rs 13

†† There was no importation of foreign coal during 1904 and 1905

‡‡ Bengal coal via Kinnar Rs 11 08 and via Ghazabadi Rs 14 82

§§ Bengal coal from Kinnar Rs 11 08 and via Ghazabadi Rs 14 82

Dandot coal Rs 11 23 and Khost and Dandot coal between Rs 6 98 and Rs 13

(b) Bengal coal from Rs 1 01 to Rs 3 37 and Khost and Dandot coal between Rs 6 01 and Rs 12 27

(c) Bengal coal via Kinnar Rs 11 08 and via Ghazabadi Rs 14 82

(d) Dandot coal Rs 11 23 and Khost and Dandot coal between Rs 6 98 and Rs 13

(e) The figures against 1901 are for second half only those for the first half are included with the North West State Railway

APPENDIX 27—contd.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905—contd.

Number	Ry system, vide App I	Calen- dar year	SOURCES OF SUPPLY		DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON										CONSUMPTION IN LBS (Calculated on the actual quantity of coal and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood)				REMARKS				
			NAME (The name of the sources of supply is reckoned either from the sources of supply or from the places of delivery to several storages)	AVERAGE DIS- TANCE CARRIED IN MILES	FOREIGN COAL			INDIAN COAL			WOOD			P. r train mile	Per on gine mile	Per 1,000 freight ton miles	Per 1,000 gross ton miles						
					Quantity in tons	Cost per ton.		Quantity in tons	Cost per ton		Quantity in tons	Cost per ton											
						In cluding freight	Ex cluding freight		In cluding freight	Ex cluding freight		In cluding freight	Ex cluding freight										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
13	B D	[1901] [1902] [1903] [1904] [1905]	Bengal	*					Rs	Rs			Rs	Rs	49 97	41 10							
14	B G P	[1901] [1902] [1903] [1904] [1905]	Eng land, Bengal and Palana	{ 61 52 51 53 52	234 1,494 813 2 5	23 23 23 24 23 23 23 23 23 23	4,966 6,027 7,531 8,010	18 69 15 41 14 13 14 07	6,910 7,2710 78,854 95,711	15 84 12 33 11 22 10 60 10 67	2 75	79	10 87 74 80 86 83	3 53 3 95 3 81 4 54 5 06	31 19 29 77 30 26 31 20 32 05	28 57 27 45 27 32 28 37 29 03	737 67 913 30 800 61 774 69 816 07	183 69 174 64 170 38 171 11 178 85	#Prices are given at the place of delivery which is the place of storage				
15 (a)	B	[1901] [1902] [1903] [1904] [1905]	Eng land, Bengal and Burma	{ 131 120 109 128 150	3,114 968 599 348	26 75 21 36 21 22 21 21	62 124 72 710 78,854 95,711	12 57 10 63 10 47 10 33	70,376 72 710 78,854 95,711	14 88 10 63 10 47 10 33		43,302 55,474 52,977 28,903	3 53 3 95 4 54 5 06	51 67 52 32 49 93 50 38	44 74 42 54 41 42 41 49	1,013 12 972 47 981 89 959 91	289 08 255 40 258 16 240 27 237 11						
16	D	[1901] [1902] [1903] [1904] [1905]	Bengal	{ 118					Information not available	382 400 393 501	5 31 5 62 4 06 5 50	3 00 2 25			56 41 61 37 56 55 71 80	50 4*							
17	D S	[1901] [1902] [1903] [1904] [1905]	Assam	*						4,834 4,616 3,953 4,838 5,012	8 50 8 50 8 50 8 50 8 50		21 26 12 10 4	2 36 2 08 2 56 1 71 2 22	1 23 2 00 1 71 1 71 2 22	45 54 51 64 13 67 51 68 49 79	30 08 36 75 29 46 33 39 32 06						
18	J B	[1901] [1902] [1903] [1904] [1905]	Bengal and Palana	{ 665 467 358 314 651					13,551 18,231 22,120 27,832 24,680	4 47 5 55 7 36 6 13 5 30		2,791 4,981 120 152 155	4 62 4 34 4 98 3 62 3 90	42 38 47 63 52 50 59 31 51 51	40 20 45 42 49 61 55 34 48 39	928 57 1,060 85 1,018 95 1,137 75 876 54	240 91 261 76 267 31 297 67 246 73						
19	M E W	[1901] [1902] [1903] [1904] [1905]	England and Bengal	{ 336 1,386 29 1,386 445	2	34 80	26 80	2,125 1,622 1,541 1,777 1,736	25 67 23 74 21 20 17 51 18 34	17 00 15 74 12 35 11 04 16 25	22 21 30 53 62	13 06 7 50 10 66 8 27 4 77	23 69 21 25 24 27 24 26 32 17	27 99 23 63 23 32 23 06 31 55									
2 (g) (m)	R M	[1901] [1902] [1903] [1904] [1905]	Eng- land, Bengal and Singa- reni	{ 720 722 725 792 780	260				118,778 113,360 95,725 109,751 134,200	18 23 16 57 15 79 14 39 14 15	6 84 5 71 6 03 4 20 4 03	2,900 2,183 2,615 2,481 2,055	5 00 5 00 5 00 5 00 5 00	39 17 39 84 37 60 38 08 40 27	34 49 34 62 31 98 32 62 3 74	415 75 447 70 37 60 406 98 485 11	160 57 164 80 174 48 169 95 171 85						
20 (a) & (b)	R & K	[1901] [1902] [1903] [1904] [1905]	Bengal	{ 677 677 677 606 605					1,106 2,068 1,792 1,719 8,942	14 65 13 52 11 46 13 63 11 03	3 51 2 56 2 37 3 00 2 35	16,302 17,503 17,105 10,673 8,923	3 24	3 18 3 27 3 47 2 91 4 32	28 26 32 00 30 91 32 25 43 29	22 91 25 98 25 25 26 28 34 79	614 42 631 90 618 87 63 13 794 75	172 87 188 86 173 68 183 90 237 60					
20 (c)	P W L	[1901] [1902] [1903] [1904] [1905]	Bengal	{ 655								1,440 1,226 1,400 1,303	3 05 3 26 3 59 3 59	21 03 19 03 21 31 20 39	19 91 17 81 19 96 19 41								
21	S L	[1901] [1902] [1903] [1904] [1905]	Bengal and Singa- reni	{ 60 63 82 83 81					55,120 53,273 60,096 68,680 72,314	13 25 13 11 12 18 11 40 11 39		1,343 10,732 10,516 11,293 9,477	4 50 5 01 4 91 4 99 5 01	34 59 36 44 37 71 38 21 36 00	31 66 33 19 31 23 34 79 33 74	828 48 82 47 774 08 849 61 802 70	201 19 209 97 205 48 219 52 200 51						

APPENDIX 27—concl'd.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905—concl'd

Number	Ry system under App I	Calen dar year	SOURCES OF SUPPLY		DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON										CONSUMPTION IN LBS				REMARKS					
			NAME (The name of the source of supply is for coal only. Wood was supplied from various sources)	AVERAGE DISTANCE CARRIED IN MILES (The distance is reckoned either from the sources of supply or from the places of delivery to several storages)	FOREIGN COAL			INDIAN COAL			WOOD			(Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to $\frac{2}{3}$ tons of wood)										
					Quantity in tons	Cost per ton	Quantity in tons	Cost per ton	Quantity in tons	Cost per ton	Per train mile	Per engine mile	Per 1,000 freight ton miles	Per 1,000 gross ton miles										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16'	17	18	19	20					
22 (a) to (g)	S M	{1901} 1902 1903 1904 1905	England Singa reni and Bengal	92 96 74 72 82	183	Rs 18 88	Rs 18 88	Rs Rs	Rs Rs	Rs Rs	Rs Rs	Rs Rs	Rs Rs	Rs Rs	Rs Rs	Rs Rs	Rs Rs	Rs Rs						
22 (j)	IV I P	{1901} 1902	England	*	18 In cluded	19 00	with	the Sout ern	Mah atta rail way	4,698	4 62	4 50	46 42	45 43	1,160 83	296 80	* Prices are given at the place of delivery which is the place of storage							
23	U C	{1901} 1902 1903 1904 1905	Bengal, Waiora & Moh pani	826 875 977 1,087 1,087	77	14 50	5 50	677 655 566 4 97 790	4 19 5 00 6 19 6 19 6 19	3 3 4 7 00 742	4 19 5 00 6 19 6 19 6 19	37 19 36 50 30 32 31 91 101 8	34 79 36 02 35 02 28 51 92 82	831 31 942 41 1,438 32 1,551 44 1,117 88	180 15 192 23 207 76 185 59 167 86									
25	B L.	{1901} 1902 1903 1904 1905	Singa reni	441																				
27	C	1905																						
30	K S	{1901} 1902 1903 1904 1905	Bengal	1,021 1,018 1,016	123	17 25		2 21 50	2 21 50	2	21 50	64 16	64 16											
32	B P	{1901} 1902 1903 1904 1905	Bengal	126 157 157 157 157																				
33	T B	{1901} 1902 1903 1904 1905	Assam																					
35	D H	{1901} 1902 1903 1904 1905	Bengal	404	778	13 76	13 62	409,150 402,442 497,185	33 15 34 61 35 90															
38	J	{1901} 1902 1903 1904 1905	Assam	9 11 12																				
TOTAL		{1901} 1902 1903		13,248 21,469 +17,696	17,422	\$18,235	+	1,956,601 2,091,992 2,203,889 +	2,447,941 2,668,424	\$	1395,297 253,093	\$												

+ Excluding the Bokharpore-Behar, Bana
ghat Krishnagar, Thoton Dayinzaik,
Howrah Amta and Howrah Shekhaia
Light railways.

‡ Excluding the Doo
ghur and Barasat
Baserhat, railways and the railways named in
the remark marked with ‡

\$ Excluding the Deo
ghur and Barasat
Baserhat, railways and the railways named in
the remark marked with \$

APPENDIX 28.

Coal mined in India during the calendar years 1885 to 1905

YEAR	QUANTITY MINED IN EACH PROVINCE												Quantity of Indian coal consumed by railways in India	QUANTITY OF INDIAN COAL EXPORTED BY SEA		QUANTITY OF FOREIGN COAL IMPORTED INTO INDIA		
	Bengal	Central Provinces	Assam	Central India	Nizam's territory	Punjab	Kashmir	Baluchistan	Rajputana (Bikaner)	Madras	Burma	Total		To Indian ports excluding Burma	To ports outside India including Burma	From United Kingdom	From other countries	
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	
1885	1,123,700	119,116	18,707	7,698		"						1,204,221	486,716		500	778,613	40,659	
1886	1,186,602	117,287	70,650	18,539								1,388,487	470,075		199	698,492	44,652	
1887	1,319,090	125,081	89,302	15,497	3,259	7,523		411				1,564,063	488,774		315	786,149	43,010	
1888	1,380,594	157,768	101,528	41,590	18,382	11,249		3,802				1,708,903	551,770	Information is not available	15,796	785,776	20,463	
1889	1,541,336	144,463	116,076	52,056	59,616	22,835		8,208				1,916,172	715,210		39,972	717,024	52,180	
1890	1,026,215	137,021	115,703	77,812	125,196	40,077		15,541				2,168,521	654,829		26,836	631,725	21,837	
1891	1,747,122	141,736	154,203	69,741	114,668	60,714		10,308		20		2,928,577	797,142		4,515	726,069	17,344	
1892	1,920,600	132,005	164,040	88,623	119,601	66,352		13,251		61	3,070	2,537,096	685,492		15,725	628,373	23,123	
1893	1,902,866	135,118	164,420	91,318	157,121	77,291		20,001		502	9,938	2,562,001	924,900		52,802	616,319	18,066	
1894	2,037,934	140,905	169,418	182,637	210,525	66,467		21,753		1,637	12,111	2,823,907	1,062,748		143,813	154,282	675,043	57,112
1895	2,716,155	122,776	172,717	118,479	292,915	72,403		25,453		1,737	17,289	3,510,019	1,110,621		162,276	211,407	773,675	15,458
1896	3,037,900	141,185	177,259	115,856	262,031	79,017		26,257		22,093	3,863,698	1,182,051	389,812	191,030	524,420	93,212		
1897	3,142,497	131,629	185,533	121,778	365,530	92,702		12,043		11,472	4,066,291	1,928,120	731,742	399,979	210,257	47,016		
1898	3,622,000	149,700	200,929	181,726	394,622	85,862		13,372	511	6,975	4,808,196	1,418,241	737,689	190,290	207,076	34,209		
1899	4,035,765	156,576	225,623	164,569	101,216	81,835		15,822	4,210	8,105	5,093,260	1,560,771	673,311	467,306	406,451	112,064		
1900	4,978,402	172,842	216,736	164,489	469,291	74,083		23,281	9,250	10,928	6,118,692	1,858,061	1,030,709	711,874	91,710	43,939		
1901	5,497,585	191,516	254,100	164,362	421,218	67,730		24,656	12,091	12,466	6,035,727	1,956,631	1,157,892	645,953	112,519	79,103		
1902	6,230,236	196,981	221,096	171,538	455,424	55,373	1,060	33,889	16,500	13,302	7,124,402	2,091,902	974,602	728,316	198,574	20,773		
1903	6,361,212	159,154	239,328	193,277	362,733	43,704	999	46,900	21,764	9,706	7,438,386	2,203,889	1,935,318	723,873	133,711	30,429		
1904	7,067,680	139,027	266,765	185,771	419,516	45,594	270	49,867	45,078	1,105	8,216,706	2,417,811	1,447,867	693,885	174,705	79,169		
1905	7,212,755	147,265	277,065	157,701	454,294	62,622	*	40,763	12,064		8,425,431	2,668,424	1,635,263	1,144,680	147,735	50,024		

* Information not available

APPENDIX 29.

State Collieries worked by Railway Companies or by the State.

PARTICULARS	KURHURBAREE AND SERAMPORE		WARORA		DANDOT		KHOSI		HARANPUR PRESSFD FUEL FACTORY		REMARKS
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905	
Name of owner	East Indian railway	dinner	State	to	North State	Western railway	North State	Western railway	North rail	West State way	
Capital outlay	Rs 21,30,572	22,34,832	14,15,597	13,24,899	1,94,753	2,13,486	3,25,402	3,05,815	85,002	80,701	East Indian railway — Capital outlay is approximate and is made up of the purchase money, Rs 3,05,154, which represents half the original cost of buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the capital expenditure incurred from 1st January 1890
Output	Large coal Tons	469,425	5,12,150	87,053	93,306	19,971	23,621	4,813	1,059		
	Small coal Tons	33,736	19,226	25,267	29,709	674	25	455	296		
	Slack coal. Tons	82,303	86,628			10,358	14,513	33,806	28,885		
	Total Tons	585,464	6,18,004	1,12,319	1,22,843	31,003	43,162	38,574	34,140	5,659	6,162 Warora — The decrease in the capital outlay in 1905 was due to certain credits, owing to a write back under stores, manu factories and other heads
Quantity issued	Tons	597,203	6,27,020	1,12,319	1,22,843	31,003	43,162	38,574	34,140	5,659	6,162 Khosi — The decrease in the capital outlay in 1905 was due to heavy issues of stores from reserve stock.
Gross earnings	Rs	10,61,310	11,20,909	5,50,702	5,67,546	2,01,048	3,25,404	3,42,710	3,01,444	56,590	68,426 Haranpur — The decrease in the capital outlay in 1905 was due to the small charge for capital outlay being exceeded by annual depreciation
Working expenses	Rs	10,61,310	11,20,809	9,73,696	3,80,477	2,27,540	3,21,843	3,06,882	2,93,050	63,775	67,075
Net earnings or loss	Rs			1,77,006	1,87,069	-26,501	8,561	36,328	8,394	-7,185	1,351
Percentage on capital				12.50	14.12		1.66	11.16	2.75		1.67
Average number of persons employed daily		8,281	8,370	1,040	937	1,229	1,360	705	719	14	7
Number of tons raised per person employed		70	74	108	125	25	32	55	48	1	2
Number of persons killed		2	1	2			1	3	5		
Number of persons injured		27	10	3	4	7	4		1		

APPENDIX 30

Accidents and casualties to trains on railways treated as one System during the Calendar years 1904 and 1905

DESCRIPTION	Accidents reported to Local Governments under section 83 of the Indian Railways Act, IX of 1890 i.e., serious accidents	Other accidents	Total number of accidents	NUMBER OF PASSENGERS AND OTHERS (Figures in italics were not passengers)				NUMBER OF SERVANTS				TOTAL OF ALL CLASSES									
				Killed		Injured		Killed		Injured		Killed		Injured							
				1904	1905	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905						
1 Collisions between passenger trains or parts of passenger trains	4	5	2	4	6	9		3	30			1	5		4	35					
2 Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line	24	20	59	31	83	51	7	1	40	63	3	1	11	24	10	2	51	87			
3 Collisions between goods trains or parts of goods trains	11	11	45	57	56	65		1		4	1	1	9	36	1	2	9	40			
4 Collisions between light engines	4	3	33	32	42	35					2	4	5		2	4	5				
5 Passenger trains or parts of passenger trains leaving the rails	82	74	47	84	129	156		1	5					10			1	15			
6 Goods trains or parts of goods trains, engines, etc., leaving the rails	9	7	377	365	386	372	1				7		8	5	8		8	5			
7 Trains or engines travelling in the wrong direction through points	11	9	118	88	119	97			11	17	2		10	6	2		21	23			
8 Trains running into stations or buildings at too high a speed	4	5	24	27	28	32			7	2		1	3	2		1		10			
9 Trains running over cattle on the line	17	14	3,248	3,274	3,265	3,288		1	6	2	1	15	2	2	1	16	8				
10 Trains running over obstructions on the line	18	15	139	165	157	180	{ 1	1	1	5	1	2	1	1	3	6	9	6			
11 Trains running through gates at level crossings	3	1	38	27	41	28	{ 1	3	7												
12 The bursting of boilers of engines			2	2	2	2															
12 (a) The bursting of tubes, etc., of engines			1	307	298	307	299														
13 The failure of machinery, springs, etc., of engines	4	3	976	813	940	816						1	2	1		1	2	1			
14 The failure of tyres			13	13	13	13															
15 Ditto of wheels	1	.	14	7	15	7	"														
16 Ditto of axles	16	10	51	59	67	69	1		8						1		3				
17 Ditto of brake apparatus	1		7	4	8	1															
18 Ditto of couplings	5	2	370	330	375	332	"		2					1	5			3	5		
19 Ditto of tunnels, bridges, viaducts, culverts, etc	2			4	2	4															
20 Broken rails		1	121	158	121	159									1			1			
21 The flooding of portions of permanent way	20	39	75	106	95	145															
22 Slips in cuttings or embankments	21	7	39	55	60	62	1	14		2	2		1	3	2	14	1				
23 Fire in trains	3	2	169	209	172	211		1	1	1				1	2	1	1	1			
24 Fire at stations, or involving injury to bridges or viaducts	6	2	48	57	54	59	2	1	1		2	1	2	1	3	1	3	1			
25 Other accidents	34	18	515	605	549	623	3	{ 7	17	3	5	38	9	6	5	51	26				
TOTAL			900	219	6,805	6,874	7,105	7,123	{ 11	3	83	140		23	15	103	115	40	23	201	270

Numerical return of servants of all races employed on each railway system (open lines only) and

NUMBER		RAILWAY SYSTEM	NUMBER OF SERVANTS EMPLOYED							
			Europeans		Lurasians		Natives		Total	
Main head	Sub head		1901 Revised	1905	1904, Revised	1905	1904, Revised	1905	1904, Revised	1905
1		Bengal Nagpur	301	447	612	754	21,842	23,757	22,815	21,958
2	(a) to (f) & (n) & (o)	Bombay, Baroda and Central India	233	237	208	271	15,212	15,783	15,713	16,291
3		Eastern Bengal State	304	333	430	405	22,691	26,757	23,425	27,495
4		East Indian	1,447	1,506	902	1,026	70,057	76,497	72,406	79,029
5		Great Indian Peninsula	1,047	1,103	983	998	60,193	65,617	62,223	67,718
6		Madras	278	269	1,586	1,616	23,353	24,386	25,217	26,270
8		Nizam's Guaranteed State	84	72	355	382	7,403	7,634	7,812	8,088
9		North Western State	870	888	662	718	57,418	61,660	59,950	63,266
10		Oudh and Rohilkhand State	283	317	293	359	20,419	21,273	20,995	21,949
11		Assam Bengal	81	85	104	95	5,556	5,771	5,741	5,954
12		Bengal and North Western	165	166	199	195	18,405	20,022	18,769	20,383
13		Bengal Dooars	5	4	6	4	874	1,170	885	1,178
14		Bhaunagar Gondal Junagadh Porbandar	11	9	26	30	2,063	2,681	2,700	2,720
15		Burma	207	209	634	616	13,888	18,678	11,329	14,498
16		Deoghar			1	1	60	66	61	67
17		Dibrugarh Sadiya	9	9			967	983	976	992
18		Jodhpur Bikaner	14	11	4	6	3,910	3,515	3,928	3,532
19		Morvi	1	1	2	2	490	388	493	391
2	(g) to (m)	Rajputana Malwa	439	444	519	439	24,599	28,072	25,57	29,005
20		Rohilkund and Kumaon	23	27	17	19	3,150	3,450	3,190	3,496
21		South Indian	157	157	683	748	14,832	15,028	15,677	15,933
22		Southern Mahratta	186	188	433	422	14,180	15,003	14,810	15,613
23		Udaipur Chitor	2	2			356	363	358	370
24		Barsat Basirhat Light				1		169		170
25		Barsi Light	1	2	2	4	184	178	187	184
26		Bulbulpore Behar Light	1	1			102	111	103	112
27		Cutch		1				55		56
30		Kalka Simla	16	16			347	312	363	329
32		Taraknath Magra Light			1	1	223	225	224	226
33		Tezapore Balipara Light	2	2	2	2	180	183	184	192
35		Darjeeling Himalayan	18	24	14	10	987	865	1,019	899
36		Howrah Amta Light	4	5	1	1	359	370	364	376
37		Howrah Shekhala Light					90	104	90	104
38		Jorhat	1	1			247	214	218	215
		TOTAL	6,280	6,535	8,749	9,175	404,143	436,348	419,172	452,058

DIX 31.

the amounts deposited by them in the Provident Fund at the close of the Calendar year 1905

AMOUNT DEPOSITED IN PROVIDENT FUND						REMARKS
Number of depositors		Amount at credit on the 31st December 1905				
Voluntary.	Compulsory	Voluntary	Compulsory	Bonus given by the Railway	Total to depositors' credit	
		Rs	Rs	Rs	Rs	
400	3,804	1,43,031	10,17,338	7,41,426	19,04,795	
	2,924		20,03,108	16,18,534	36,21,642	Excludes the Provident Fund transactions of the Godhra Rutlam Nangda railway which are included with those of the Rajputana Malwa railway
150	5,162	26,112	12,77,167	11,55,265	24,58,544	
6,823	10,108				1,33,35,230	Amounts under voluntary and compulsory deposits and bonus given by the railway are not available
8	7,793	947	95,40,124		95,41,071	The bonus given by the railway is included in the amount at the credit of voluntary and compulsory depositors
101	6,099	1,24,300	17,31,719	18,96,788	32,52,807	
	1,407		5,51,048	4,87,894	10,38,942	
433	7,996	91,838	32,50,164	29,05,735	62,47,737	
131	3,219	28,995	8,97,811	7,58,954	16,85,760	
"						
"	1,112		2,40,315	1,36,551	3,76,866	
9	2,709	61,940	8,02,010	7,50,722	16,15,272	
	148		26,015	20,104	46,119	
153	480	37,259	1,80,705	1,37,814	3,60,778	
	2,934		8,60,422	6,80,061	15,40,483	
"						
34	358	7,953	82,882	73,673	1,64,008	
"	"	"	"	"	"	* Information not available owing to destruction of records by fire
1	450	119	1,53,617	1,29,491	2,83,257	
14	3,208	4,873	11,40,615	6,30,851	17,76,339	
	8,549		12,43,048	6,18,840	18,61,888	
	32		6,495	2,920	9,415	
"						
"	14		262	208	470	
"	15		997	757	1,754	
"	128		1,27,681	69,114	1,96,795	
"	85		10,159	4,692	14,851	
"	18		2,019	1,107	3,126	
10	26	1,078	6,533	3,512	11,123	
8,263	63,278	5,28,415	2,51,57,381	1,23,23,013	5,13,40,072	

APPENDIX 32.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1905

NUMBER	Corps	ENROLLED STRENGTH					Total number of European and Eurasian servants on open lines of railway	Sergeant Instructors furnished by the Army	REMARKS			
		EFFICIENTS			Non-officers	Total number of volunteers of all nationalities in corps, including servants on construction work						
		Officers	Non Commissioned officers	Volunteers								
Main head.	Sub-head											
1	Bengal Nagpur	29	155	1,003	11	1,201	1,201	10				
2	(a) to (f) & (n) & (o)	Bombay, Baroda and Central India— <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles</i>	16	63	513	8	600	508	5			
3		Eastern Bengal State	21	93	543	8	670	738	4			
4	"	East Indian	65	164	1,801	18	2,141	2,532	18			
5	"	Great Indian Peninsula— <i>First Battalion, Great Indian Peninsula Railway Volunteer Rifles</i>	49	182	1,234	21	1,486	2,101	13			
6		Madras	45	191	1,227	30	1,493	1,884	12			
8		Nizam's Guaranteed State— <i>Hyderabad Volunteer Rifles</i>	8	30	187	14	239	451	3			
9		North Western State	41	133	1,061	33	1,271	1,606	12			
10	"	Oudh and Rohilkhand State— <i>Oudh and Rohilkhand Railway Volunteer Rifles</i>	13	46	401	4	467		4			
		<i>Oudh and Rohilkhand Railway Servicists</i>	2	4	49		55	676				
		<i>Oudh Light Horse</i>			1		1					
11		Assam Bengal	17	31	225		273	180	3			
12		Bengal and North Western— <i>Bengal and North Western Railway Volunteer Rifles</i>	21	50	250	5	335		5			
		<i>United Provinces Light Horse, Gorakhpur Squadron</i>	2	5	30		37	661	1			
14		Bhavnagar-Gondal Junagadh Forbes dar— <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F Company</i>	1	6	23		35	39	1			
15		Burma	33	87	532	1	653	825	9			
19		Morvi— <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F Company</i>			2		2	3				
3	(g) to (m)	Rajputana Malwa— <i>Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles</i>	30	78	660	2	770	933	11			
20	"	P. L. M. L. and T. M. M.— <i>Railway</i>			2	31	33	46				
21		South Indian	21	78	481		580	905	8			
22		Southern Mahratta	19	137	467	4	627	610	6			
23		Udaipur Chitor— <i>Bombay, Baroda and Central India Railway Volunteer Rifles</i>	1	1			3	2				
32		Tarakeswar Magra— <i>East Indian Railway Volunteer Rifles</i>			1		1	1				
35		Darjeeling Himalayan— <i>Northern Bengal Mounted Rifles, "A" and "B" Troops</i>	1	3	12		16	84	1			
		TOTAL	488	1,545	10,814	162	12,939	15,669	125			

APPENDIX 33

Strength and cost of the Police force on each Railway system (open lines), and the amount of compensation payments on account of claims for goods lost or damaged for the Calendar year 1905

NUMBER	RAILWAY SYSTEM	Subordinate officers	Constables and men	PORTION OF THE TOTAL ANNUAL COST BORNE BY THE RAILWAY				Cost of force to the railway per mile open	Compensation payments on account of claims for goods lost or damaged	REMARKS
				Supervision	Constables and men	Contingencies	Total cost of force to the railway			
Main head	Sub head	Average No	Average No	Rs	Rs	Rs	Rs	Rs	Rs	
1	Bengal Nagpur	13	787	17,741	50,536	4,107	72,137	96 68	97,571	
2	(a), (c) to (f) & (n) & (o)	Bombay, Baroda and Central India	23	668	27,671	63,037	5,339	96,047	111 89	19,250
3	Eastern Bengal State	95	851	1,192	52,695	116	54,004	46 15	81,755	
4	East Indian	68	1,978	59,069	1,35,407	89,414	2,33,890	101 62	61,788	
5	Great Indian Peninsula	61	1,621	61,075	1,35,525	20,203	2,16,803	72 53	1,01,327	
6	Madras	22	730	15,279	88,300	10,529	1,14,108	75 31	4,462	
8	Nizam's Guaranteed State	3	389	17,449	44,263	2,437	64,219	86 46	889	
9	North Western State		1,520		1,13,820	783	1,44,003	35 27	48,155	
10	Oudh and Rohilkhand State	15	649	8,072	45,553	2,489	56,114	44 56	17,563	
11	Assam Bengal	3	223	2,253	16,852	1,106	20,211	26 07	3,232	
12	Bengal and North Western	20	609	3,228	52,718	1,686	57,632	39 29	4,280	
13	Bengal Dooars		9		944		944	6 17	1,310	
14	Bhavnagar Gondal Junagad Porbandar	26	123	16,787	11,481	6,477	34,715	76 29	843	
15	Burma	92	469	20,674	73,533	17,241	1,11,448	83 16	7,501	
18	Jodhpur Bilaner	3	45	1,780	3,966	266	6,012	7 22	689	
2	(b) & (g) to (m)	Rajputana Malwa	122	615	38,639	85,025	6,059	1,30,623	59 64	27,104
19	Morvi	3	12	772	1,232	596	2,600	29 00	96	
20	Rohilkund and Kumaon	11	148	1,055	12,930	1,649	14,931	51 40	1,836	
21	South Indian	243		45,918	14,967		60 885	44 98	4,672	
22	Southern Mahratta	14	727	17,298	72,926	6,796	96,920	53 58	7,036	
25	Barsi Light	1	4	106	587	47	740	26 49	44	
27	Cutch				26		26	24 23		
30	Kalka Simla	1	44	1,213	1,908	149	3,270	55 01	498	

APPENDIX 34

Transactions of the Fine Funds for the Calendar year 1905

NUMBER	Main head	Sub head	RAILWAY SYSTEM	ASSETS				DISBURSEMENTS					Balance on 31st December 1905 (Revised)	
				Balance on 31st December 1904 (Revised)	Fines and bonus for forfeit during 1905	Interest on balance	Total	Hospital for sick employees	Compassionate allowances	Schools	Recreation clubs	Miscellaneous		
1		Bengal Nagpur		Rs 23,974	Rs 17,922	Rs 776	Rs 42,672	Rs	Rs	Rs 950	Rs 4,035	Rs 8,969	Rs 13,954	Rs 28,718
2	(a), (c) to (f) & (n) & (o)	Bombay, Baroda and Central India		10,665	3,550	420	14,835	120	1,610	7,500	1,956	952	11,568	3,267
3		Eastern Bengal State		7,061	20,784	304	28,149		745	3,013	5,515	6,478	15,751	12,893
4		East Indian		1,11,876	24,844	3,676	1,40,396			2,684	1,811	29,056	33,551	1,06,845
5		Great Indian Peninsula		5,431	17,855	207	23,583		1,606	873	1,250	2,343	6,072	17,511
6		Madras		1,07,674	9,859	4,157	1,21,690		6,073	140	141	8,358	14,712	1,06,978
8		Nizam's Guaranteed State		7,029	2,719	217	9,965			70		455	555	9,410
9		North Western State		15,849	18,791	547	35,187	100	448	5,454	10,250	1,439	17,741	17,446
10		Oudh and Rohilkhand State		12,090	5,183	447	17,720		19	5,204	360	3,828	9,411	8,309
11		Assam Bengal		11,763	9,230		20,993		1,872	175	8,335	6,449	11,331	9,662
12		Bengal and North Western		79,704	17,402	1,032	98,138			831	3,149	3,779	7,759	90,379
13		Bengal Dooars		900	1,014	42	1,956				338		338	1,618
14		Bhavnagar Gondal Junagadh Porbandar		5,864	1,112	178	7,154		48	260	198	528	1,034	6,120
15		Burma		11,151	15,543		26,694			2,683	3,528	12,769	18,980	7,714
18		Jodhpur Bikaner		5,625	2,007		7,632			114	702	6	822	6,810
2	(b) & (g) to (m)	Rajputana Malwa				Information not available	owing to destruction of records by fire						48	1,549
19		Morvi		1,485	112		1,597		48				48	1,549
20		Rohilkund and Kumaon		24,309	5,264	682	30,455		300		607		907	29,543
21		South Indian		1,55,751	7,128	4,300	1,67,269		1,820	386	14,749	1,303	18,258	1,49,011
22		Southern Mahratta		962	3,907	23	4,892	100		856	1,895	275	3,126	1,766
23		Udaipur Chitor		802	47		319							349
24		Barnet Basirhat Light		"	72		72					72	72	...
26		Bukharpore Behar Light			9		9					9	9	.
30		Kalka Simla		200	305		560					13	13	547
32		Tarkeshwar-Mogra Light			19		19	19					39	...
33		Tezpore-Bahpara Light			36		36			20			20	16
35		Darjeeling Himalayan		145	153		298				100	2	102	196
36		Hovrah Amta Light			166		166					166	166	.
37		Herrah Shekhala Light			26		26					26	26	.
38		Jorhat		392	90	12	494			..		120	120	374

APPENDIX 35.

Railway and Railway Aided Schools at the close of the Calendar year 1905

Main head Number	Sub head	RAILWAY SYSTEM (vide APPENDIX I)	Number of schools	RAILWAY SCHOOLS								RAILWAY AIDED SCHOOLS				REMARKS		
				ATTENDANCE				CONTRIBUTIONS				Expenditure	Number of schools	AVERAGE DAILY ATTENDANCE		RAILWAY GRANT		
				Children		Apprentices and workmen		By Government	By Railway	From Revenue	From Fine Fund			Chil dren	Apprentices and workmen	From Revenue	From Fine Fund	
				Number on the rolls	Aver age daily at tendance	Number on the rolls	Aver age daily atten dance											
1	B N	European Native	5 3	210 231	172 191			3,055 196	Rs 4,125	Rs 11,130	Rs 10,486	4	295			Rs 600	Rs	
2 (a) to (f) & (n) & (o)	B B & G I	European Native	3 2	119 18	81 12	4 21	4 18	1,491 153	4,020 600	300	668 237	2,064 990	18	59			3,258	7,500
3	E BS	European Native	5	98	64	252	67		1,129			1,129	13	585			752	852
4	E I	European Native	18 67	850 2,620	769 1,726	62	52	13,816	27,277		79,849	1,20,942	2	57			2,161	2,161
5 (a)	G L P	European Native	5	223	189			2,769	12,282	642	2,490	18,183	8	109			3,619	15
5 (b) to (f)	I M	European Native	2	114	75	"			7,123	216	984	8,323	2	79			270	
6	M	European	9	436	363			4,592	16,732	115	4,321	25,760	9	161			3,953	25
8 (a) & (b)	N G S	European Native	1 1	59 64	50 47	6	3		1,604 996		495 158	2,089 1,154	3	131			510	70
		European	2	72	54	32	21	2,066	1,927	353	721	5,067	19	489			14,647	2,678
9	N W	Native	24	104	86	2,309	577		5,634	98	313	6,245	3	258			2,729	498
10	O R	European Native	4 3	50	43	38	35	876	910	1,796	1,260	4,372	15	56			4,603	2,306
11	A B	European	1	24	29			249	1,200	175	131	1,755						
12	B & N W	European Native	2	62	58			1,255	1,800	831	594	4,780	2	64			324	
13	B D	Native			"								1	17			120	
14	B G J P	European Native	1 2	11 91	9 72				996 584	260 242	197 826	1,453 657						
15	B	European Native	3 3	66 218	54 177	23	20	2,177 2,534	81 605	1,420	1,378 3,220	4,317 7,779	17	35			272	272
17	D S	Native	1	72	65				300		699	999						
18	J B	Native	1	12	9					114		114	114					
8 (c)	H G V	European Native	1	23	11				420		110	530	7	36			120	
2 (g) to (m)	R M	European Native	8 6	161 316	154 263	97 72	85 65	2,260 960	5,889 901	1,851 1,932	3,726 2,360	13,726 5,453	1	69			180	
21	S I	European Native	4 1	154 58	89 54	"			991	4,196	386	721	6,294					554
22	S M	European Native	8 6	207 144	168 110	98	34	911	6,011	30	1,779	8,731	7	376			550	
33	T B	Native	1			32	16		109	20		129	129					96
5 (g)	G L	Native									"	1		17		240		
	Total		203	6,907	5,214	6,106	2,104	43,864	11,106	13,981	1,30,693	3,00,734	171	4,582	27	42,640	18,042	

In addition to these grants from the Fine and the North Western State railway also contributed Rs 1,783 for the Oakgrove School at Massooria and Rs 45 to the Cathedral Orphanage, Lahore

* The average daily attendance is more than the number on the rolls owing to the numbers on the rolls having been more during the year than that on the 31st December 1905

APPENDIX 38

*History of open lines of railways, and of lines under construction or sanctioned for commencement,
on the 31st December 1905*

INDEX

NUMBER	Main head	Sub head	Railway	Page	NUMBER	Main head	Sub head	Railway	Page
A									
5	(b)	Agra-Delhi Chord	137	30	(a)	Kalka Simla			197
2	(g)	Ahmedabad Dholka	116	21	(b)	Karaikal Peralam			182
2	(h)	Ahmedabad Parantū	117	9	(g)	Khushalgarh Kohat Thal			157
9	(j)	Amritsar Patti	159	6	(b)	Kolar Gold fields			143
11	(a)	Assam Bengal	160	22	(g)	Kolhapur			190
6	(g)	Azhikal Mangalore	147						
B									
24	(a)	Baraset-Basirhat Light	194	17	(b)	Ledo and Tikak Marghorita Colliery			174
25	(a)	Bara Light	195	20	(b)	Lucknow Bareilly			179
22	(b)	Bellary Raigarh	187	9	(c)	Ludhiana Dhuri Jekhal			153
12	(a)	Bengal and North Western	163						
13	(a)	Bengal Doors	165						
13	(b)	Bengal Dooars Extensions	167						
1	(a)	Bengal Nagpur	107	6	(a)	Madras			142
8	(b)	Bezwada Extension	149	6	(c)	Madras (North East line)			144
22	(l)	Bezwada Masulipatam	194	5	(h)	Matheran Light			141
14	(a)	Bhavnagar Gondal Junagadh Porbandar	167	1	(c)	Mourbanj			169
5	(c)	Bhopal Itarsi (British section)	137	6	(v)	Morappur-Dharmapuri			147
5	(d)	Bhopal Ujjain	138	3	(c)	Morvi			177
18	(b)	Bikaner	175	23	(h)	Mymensingh Jamalpur Jagannathganj			127
5	(e)	Bima Goona Baran	189	22	(i)	Mysore Nanjangud			191
22	(c)	Birur Shimoga	188			Mysore section (Southern Mahratta)			191
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15	(b)	Burma extensions	171	2	(c)	Nagda Ujjain			113
				6	(d)	Nilgiri			145
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3	(d)	Cooch Behar	127	9	(h)	North Western (State)			151
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9	(t)	Dandot Light	157						
35	(a)	Darjeeling Himalayan	200						
4	(b)	Delhi Umballa Kalka	181						
16	(a)	Deoghar	172	2	(l)	Palunpur Deesa			118
28	(a)	Dholpur Bara	197	1	(d)	Parlakimedi Light			110
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29	(a)	Dwara Therma Light	197	21	(c)	Pondicherry			183
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	"	" " Rajputana Malwa		9	(d)	Rajputana Bhatinda			154
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4	(a)	East Indian	123	20	(a)	Rohilkund and Kuwaon			177
G									
2	(n)	Gadwar's Dabholi	122	6	(h)	Salem Attur			147
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5	(a)	Great Indian Peninsula	133	4	(c)	South Behar			146
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36	(a)	Howrah Amtri Light	201	21	(d)	Tanjore District Board			184
37	(a)	Howrah Shekhalkha Light	202	2	(f)	Tapti Valley			115
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APPENDIX 38

History of railways constructed and in progress.

[For Index see page 106]

Number Main head 1
Sub heads (a) to (g) **BENGAL-NAGPUR RAILWAY SYSTEM—**

Lines comprising the system.—The Bengal-Nagpur railway system is made up of—

		Open line	Under construction or sanctioned for construction	Total
(a) Bengal Nagpur railway	(5' 6" gauge)	Miles 1,377 83	Miles 29 89	Miles 1,407 72
East Coast (State) railway, Northern section	(5' 6" gauge)	311 93		311 93
(b) Jubbulpore-Gondia Extension, Bengal Nagpur railway	(2' 6" gauge)	228 77	61 26	290 03
(c) Mourbhanj railway	(2' 6" gauge)	92 41		92 41
(d) Parlakimedi Light railway	(2' 6" gauge)	24 62		24 62
(e) Raipur Dhamtari branch, Bengal Nagpur railway	(2' 6" gauge)	56 24		56 24
(f) Gondia Chanda	(2' 6" gauge)		212 40	212 40
(g) Purulia Ranchi	(2' 6" gauge)		72 28	72 28
		Total 2,031 80	375 63	2,407 63

Running powers—

Home line over Foreign lines —

At Katni, East Indian railway	for passenger and goods trains	Miles 0 30
At Asansol „ „ „		{ 0 50
At Howrah „ „ „	for passenger trains only	1 00
At Nagpur, Great Indian Peninsula railway		{ 0 65
Waltair to Vizagapatam, including wharf and swamp lines, Southern section, East Coast (State) railway	for passenger and goods trains	{ 4 97
		Total 7 42

Foreign line over Home line —

Great Indian Peninsula railway at Katni (for passenger trains only)	1 60
	Total 7 42

1 (a) Bengal-Nagpur railway (5' 6" gauge)—

Details of construction—

The open mileage of the Bengal-Nagpur railway, 5' 6" gauge, amounts to 1,689 76 miles, which may be divided into (1) *Bengal-Nagpur railway proper*, main line (Asansol to Nagpur), 626 83 miles, branches, 751 miles, and (2) *Northern section of the old East Coast (State) railway*, main line (Barang to Waltair), 281 75 miles, branch, 27 18 miles. Of this 68 78 miles are double line. There are under construction 29 89 miles of single line, and 4 16 miles of main line are in course of being doubled.

The construction of the first portion of the main line, Asansol to Nagpur, was sanctioned in 1884 and opened through in 1891. The Sini-Howrah section was opened in 1900.

Permanent-way—The line is laid with 75-lb and 85-lb steel rails on transverse wooden, steel and cast iron pot sleepers.

Ballast—The line is ballasted throughout with stone, except for a few miles on the Chakurdharpore district where laterite is used.

Fencing.—The line is fenced only between Nagpur and Kamptee and at the more important stations, also at some of the station yards and first class level crossings on the Barang-Waltair section.

Curves—On the main line there are no curves sharper than 1,000 feet radius.

Gradients—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100, between Sini and Khargpur, 1 in 125, between Khargpur and Waltair, 1 in 150, between Khargpur and Howrah, and Khurda Road and Puri 1 in 200, and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction.

Terms of contracts—

The Bengal Nagpur railway is worked under the following contracts—

Contracts of—9th March 1887—Bengal-Nagpur Railway Company's principal contract

31st December 1891—Contract for the construction and working of a branch line from Jharsuguda (Sambalpur Road) station on the main line to Simlaipur

27th June 1901—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore Cuttack extensions

23rd January 1902—Contract for the construction and working of the Raipur-Dhamtari (2' 6" gauge) feeder line with a branch to Rajim, an extension (5' 6" gauge) from Sini, via Midnapore, to Howrah, with branches from Midnapore to Cuttack and the Jharia coal-fields, a line (2' 6" gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nampur to Chhindwara, and for the working of the Northern section of the East Coast (State) railway as part of the undertaking.

The general conditions of the contracts are as follows—

Government aid—Free grant of land and guarantee of interest in sterling at 4 per cent per annum on £3,000,000 share capital. On any further capital that may be required the guarantee to be 4 per cent or such other rate as may be agreed upon.

Terms of contracts—The contracts provide for the Company using £3,000,000, any further money required being provided either by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such periods and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contracts, all moneys raised by the Company become the absolute property of the Secretary of State.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 108]

Number Main head 1
Sub heads (a) to (g) BENGAL-NAGPUR RAILWAY SYSTEM—*contd*1 (a) Bengal-Nagpur railway (5' 6" gauge)—*concl*Terms of contracts—*concl*

Currency of contracts—

(1) *Principal contract*—Government may determine the contract by giving twelve months' previous notice on the 31st December 1913 or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line be worked at a loss. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay at par the amount of the share capital which has been paid in by the Company.

(2) *Sambalpur branch contract*—The contract for this branch brings it within the provisions of the original contract of 9th March 1887, but provides that the Government may purchase the branch at any time after 1st January 1895 on giving twelve months' notice.

(3) *Contract of 23rd January 1902 Northern section, East Coast (State) railway*—Government may, at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltur Junction with all appurtenances, without compensation in respect of such retransfer.

Power of Company to surrender contract—Nil

Terms of working—After deducting working expenses—which may include any single item of capital expenditure, classed as a "Minor Work," up to Rs 1,000 but not exceeding Rs 2,000 at the discretion of the Consulting Engineer, subject to a maximum charge on such account of Rs 20 per mile of the open system in each half-year and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision—three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between the Company and Government in the proportion which the gross earnings of the Company's undertaking, exclusive of the Northern section of the East Coast (State) railway, bear to the gross earnings of the latter section.

Rates and fares—Certain maxima and minima have been fixed within which the Company is permitted to vary rates. The Madras Railway Company has the power to quote through rates in the direction of Madras from Bengal-Nagpur stations between Cuttack and Waltur. The Bengal-Nagpur Railway Company similarly has power to quote rates from Madras railway stations, Tadepali and Cuttack, in the direction of Calcutta.

Statistics of working—See page 109

1 (b) Jubbulpore-Gondia extension, Bengal-Nagpur railway (2' 6" gauge)—

Details of construction—

The open mileage of the Jubbulpore Gondia extension amounts to 228 77 miles, which may be divided into main line (Jubbulpore to Gondia), 140 94 miles, and branches, 87 83 miles. There are still 29 12 miles (Pench Valley railway) under construction, and 32 14 miles (Mandla branch), sanctioned for construction. The construction of the line was sanctioned in 1901 and it was opened in July 1904.

Permanent-way—The permanent-way consists of 41-lb flat-footed steel rails on sll sleepers.

Ballast—The line is ballasted with stone, except between Seoni and Chhindwara where good black basalt has been used.

Fencing—Only important station yards are fenced.

Curves—The sharpest curve is of 409 feet radius.

Gradients—The ruling gradient is 1 in 80.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working—See page 109

1 (c) Raipur-Dhamtari branch, Bengal-Nagpur railway (2' 6" gauge)—

Details of construction—

This branch is 56 24 miles in length and consists of the main line (Raipur to Dhamtari), 45 74 miles, and the branch (Abhanpur to Rajim), 10 50 miles. It was sanctioned in 1897 and opened in 1900.

Permanent-way—The line is laid with 31-lb flat-footed steel rails on sll sleepers.

Ballast—Moorum or sand and stone in a few cuttings.

Fencing—The line is unfenced.

Curves—The sharpest curve is of 409 feet radius, at Raipur station.

Gradients—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working.—See page 109.

APPENDIX '38—contd.

History of railways constructed and in progress.

[For Index see page 106]

Number Main head 1
Sub heads (a) to (g) BENGAL-NAGPUR RAILWAY SYSTEM—*contd*

Statistics of working—

Calendar Year	(BENGAL-NAGPUR RAILWAY, INCLUDING THE NORTHERN SECTION OF THE LAST COAST (STATE) RAILWAY, THE RAIPUR DHAMTARI BRANCH AND THE JUBBULPORE GONDIA EXTENSION)							TABLE II										
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent age on capital outlay	Interest	Company's share of not earnings	Gain or loss to the State	Vagpur-Chittisgarh, 3' 3"	Katni Umaria, 5' 6"	(a) Bengal Nagpur, 5' 6"	(b) & (c) Jubbulpore Gondia extension and Raipur Dhamtari branches, 2' 6"	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings
1879	Rs 28,62,990	Rs 1,03,92	Rs 28,215	0 51	Rs 83,911	Rs 1,58,804	Rs -83,911											
1880	55,19,511	1,03,92	28,215	0 51	66,056	0 90	-1,30,589	51	79 51									
1881	73,5,710	2,81,529	28,215	0 51	2,62,932		-1,96,876	87	76 53									
1882	90,61,388	6,0,386	1,69,171	2 09	3,39,967		-1,50,796	114	68 70									
1883	96,13,50	13,20,021	6,88,860	7 00	3,73,283		+3,10,577	170	48 19									
1884	1,06,31,112	13,23,014	6,59,030	6 19	4,24,400		+2,33,630	171	57 82									
1885	1,50,66,406	14,14,689	4,93,575	3 28	5,86,281		-92,706	183	65 12									
1886	1,81,70,155	11,24,521	5,93,514	2 91	7 29,564		-1,36,041	183	62 51	37	104 35							
1887	2,45,30,957	14,47,705	3,03,207	1 25	11,35,563		-10,32,356	177	59 09	41	116 41							
1888	5,23,92,591	16,03,193	5,62,971	1 07	22,17,333		-16,54,362	-								161	67 53	
1889	7,08,75,456	10,96,930	4,03,160	0 57	29 96,364		-25 93,204									131	80 93	
1890	8,14,66,762	23,64,575	5,47,463	0 67	33 68,852		-23,41,369	-								101	80 89	
1891	9,05,04,161	54,57,456	26,84,153	2 96	35 05,676		-8 21,225	-								129	50 81	
1892	9,56,14,736	60,88,562	30,08,166	3 15	39 03,315		-8,97,179									141	50 55	
1893	9,60,08,421	61,17,751	32,62,220	3 33	43,97,591		-11,38,374									144	49 17	
1894	9,81,73,789	66,90,619	32,53,414	3 92	45 83,993		-13,25,579									149	51 80	
1895	9,85,94,777	68,74,710	33,11,444	3 98	48,6,800		-13,15,356									153	48 49	
1896	11,05,30,319	63,68,52	29,27,560	2 65	48,27,501		-18,09,635									142	54 03	
1897	13,01,55,781	62,90,379	29,70,559	2 28	51,35,240		-21,55,651									138	51 94	
1898	14,67,03,520	65,70,193	33,63,504	2 29	51,23,186		-20,59,332									143	51 10	
1899	16,65,90,365	90,73,160	47,21,814	2 83	59,75,853		-12,54,000									152	47 96	
1900	17,41,73,604	1,29,7,223	77,18,010	4 43	64,90,647		+12,22,413									207	40 56	
1901	21,19,23,2761	0,47,569	61,48,648	2 90	70,88,163	1,78,810	-20,18,32									161	52 68	25
1902	23,51,91,979	1,12,18,25	69,70,316	3 10	85,44,311	41,604	-16,06,569									176	51 09	21
1903	24,97,55,916	1,55,47,702	70,45,251	2 82	89,66,191	4,057	-10,24,943									178	5+ 63	21
1904	26,14,3,43,189	12,137	95,87,126	3 67	9,41,624	355	+15,317									210	48 97	31
1905	27,93,72,570	2,41,70,900	1,31,04,052	4 90	1,00,32,316		+33,71,734									270	44 53	42
																		71 83

1 (c) Mourbhanj railway (2' 6" gauge)—

Details of construction—

This railway is 82 41 miles long. Its construction was sanctioned in 1902 and it was opened in 1905

Permanent way—The line is laid with 30-lb flat-footed steel rails on sal sleepers

Ballast—The line is ballasted with screened laterite, gravel and broken laterite

Fencing—The line is unfenced

Curves—The sharpest curve is of 955 feet radius,

Gradients—The ruling gradient is 1 in 100

Terms of contract—

The line is worked under an agreement between the Maharaja of Mourbhanj and the Bengal-Nagpur Railway Company, approved in Railway Board's letter No 223 R T of the 10th March 1905

The general conditions of the agreement are as follows—

Government aid—Nil The line is the property of the Maharaja of Mourbhanj.

Currency of agreement—To the end of 1905

Terms of working—Actual cost

Rates and fares—To be fixed by the Company

Statistics of working—

Calendar year	TABLE I				TABLE II			
	Capital outlay to end of the year	Gross earnings	Not earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings		
1905	Rs 6,21,893	Rs 31,494	Rs 7,422	1 19	Rs 20	76 43		

APPENDIX 38—contd.*History of railways constructed and in progress.*

[For Index see page 106]

**Number Main head 1
Sub heads (a) to (g) BENGAL-NAGPUR RAILWAY SYSTEM—concl'd****1 (d) Parlakimedi Light railway (2' 6" gauge)—**

On the 20th May 1901 the Indian Railways Act, 1890 (IX of 1890), except section 135, was applied to the line. The working of this railway was taken over by the Bengal Nagpur railway from the 1st January 1902

Details of construction—

This railway is 24.62 miles long. Its construction was sanctioned in 1898 and it was opened in 1900. It runs from Naupada to Parlakimedi.

Permanent-way—The line is laid with 30-lb flat-footed steel rails on transverse wooden sleepers.

Ballast—The line is ballasted throughout with laterite, gravel and stone.

Fencing—Short lengths of fencing have been provided in a few places where the railway in cutting runs alongside the road.

Curves—There are no curves of less than 1,000 feet radius.

Gradients—The ruling gradient is 1 in 100.

Terms of contracts—

The Parlakimedi Light railway is worked under an agreement, dated the 11th April 1902, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company.

The general conditions of the agreement are as follows—

Government aid—Nil. The line is the property of the Raja of Parlakimedi.

Currency of agreement—The agreement was current to end of 1905, subject to renewal.

Terms of working—Actual cost.

Rates and fares—To be fixed by the Company.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings.
1903	Rs 7 10 974	Rs 16,673	Rs -9 25		Rs. 13	155 70
1904	7,10,974	20,673	-1 301		16	106 29
1905	7 10 975	27 151	1 481	0 63	21	83 51

1 (f) Gondia-Chanda railway (2' 6" gauge)—**Details of construction—**

This railway, which runs from Gondia to Chanda (116.65 miles), with a branch from Pauni to Nagpur (63.75 miles), total length 212.40 miles, was sanctioned in 1901 and work was started in November 1905.

1 (g) Purulia-Ranchi railway (2' 6" gauge)—**Details of construction—**

This railway, which runs from Purulia to Ranchi (72.28 miles), was sanctioned in 1905, and construction was commenced in November of that year.

**Number Main head 2
Sub heads (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—**

Lines comprising the system—The Bombay, Baroda and Central India railway system is made up of—

	Open line Miles	Under construction or sanctioned for construction Miles	Total Miles
			Miles
(a) Bombay, Baroda and Central India railway	{ (5' 6" gauge) 465 12 } 504 35		504 35
(b) Godhra Rutlam Nagda railway	{ (3' 3" gauge) 39 23 }	1' 1 14	141 14
(c) Nagda Ujjain railway	(5' 6" gauge)	33 32	34 32
(d) Petlad Cambay railway (Anand Tirapur section)	(5' 6" gauge)	21 0	21 50
(e) Petlad Cambay railway (Tirapur Cambay section)	(5' 6" gauge)	10 93	12 31
(f) Tapti Valley railway	(5' 6" gauge)	155 48	155 48
(g) Ahmedabad Dholka railway	(5' 3" gauge)	33 50	33 50
(h) Ahmedabad Parantip railway	(3' 3" gauge)	54 70	54 70
(i) Gaekwar's Mehsana railway	(3' 3" gauge)	92 61	130 74
(j) Jaipur (Siwai Madhopur) railway	(3' 3" gauge)	32 18	40 67
(l) Palanpur Deesa railway	(3' 3" gauge)	17 28	17 28
(m) Rajputana Malwa railway	(3' 3" gauge)	1,782 35	1,782 35
(n) Vijapur Kalol Kadi railway	(3' 3" gauge)	41 37	41 37
(o) Gaekwar's Dahboi railway	(2' 6" gauge)	91 49	94 49
(p) Kajipura railway	(2' 6" gauge)	37 37	37 37
Total	3,036 61	89 17	3,123 78

Running powers—**Home line over foreign line—**

Dadar Junction to Carnac bridge, Great Indian Peninsula railway (for goods trains only)

Miles
4 39

Foreign lines over home line—

Last Indian railway, Agra East Bank to Agra Fort (for goods trains only)

Miles
1 00

Great Indian Peninsula railway at Ujjain (for passenger and goods trains)

Miles
0 24

" " " Dadar Junction to Colaba (for goods trains only)

Miles
7 25

" " " at Agra (for passenger and goods trains)

Miles
2 89

Total

Miles
11 88

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 2
Sub heads (a) to (o), BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd*

2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)—

Details of construction—

The open mileage amounts to 504 35 miles, which may be divided into 389 35 miles of main line, and 115 miles of branches 251 90 miles are double line

First sanction to the construction of the main line (Bombay (Colaba) to Wadhwan) was accorded in 1856 and the line was opened throughout in 1872

Permanent-way—The main line is laid with 69 lb double headed and 82-lb bull-headed steel rails on creosoted pine and oval pot sleepers

The branches are laid mostly with 69-lb double-headed and 41½ lb, 48-lb, 50 lb and 75 lb flat-footed steel rails on oval pot and wooden sleepers

Ballast—The line is mostly ballasted with broken stone, gravel and shingle

Fencing—The line is fenced throughout except the Baroda-Godhra Chord which is being fenced.

Curves.—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Patri branch of 2,865 feet radius, and on the Godhra-Bardoda Chord of 1,910 feet radius

Gradients—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 and even 1 in 100 at the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahu low level bridge where it is 1 in 80, on the Patri branch and the Godhra-Bardoda Chord it is 1 in 300, except for short lengths of 1 in 200 on the latter

Terms of contracts—

The railway is worked under the following contracts —

Contracts of—21st November 1855—for the construction and working of a line from Surat to Baroda and thence to Ahmedabad

2nd February 1859—for the construction and working of a line from Bombay to Surat as one undertaking

17th November 1871—for the construction and working of an extension line to Viramgam and Wadhwan.

14th May 1886—Supplemental to that of 1855, incorporating the branch line from Anand to Dakor and its extension to Pali (Sevalia) and Godhra with the general undertaking

1st February 1901—as to share of working expenses debitable to branch lines worked

The general conditions of the contracts are as follows —

Government aid—Guarantee of interest in sterling at 5 per cent for the term of the contract. On some portion of the share capital and on debentures lower rates of interest are also guaranteed

Currency of contracts—The contracts are current for a period of 99 years from 1855, after which the line becomes the property of Government on payment of the return capital outlay in sterling. The Government may, however, determine the contracts by purchase after the expiration of 25 or 50 years of the term, namely, in 1880 or 1905, at the mean market value of the shares during the three preceding years, possession being taken of the railway at the half-yearly day next but one following the notice. The Government may also determine the contracts at any time, on giving three months' notice, if the Company fails to observe its obligations. In such case, Government repay the capital expended

NOTE.—The Government relinquished their right to determine the contracts at the end of the 25th year but on the 10th May 1905 the Secretary of State for India gave notice of his intention to terminate the contracts by purchase of the Company's property, with effect from the 1st January 1906, after which date the line will be worked by a reconstituted Company under a new contract

Power of Company to surrender contracts—The Company may surrender, on six months' notice, at any time receiving back the capital expended

Terms of working—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs 1,000 to be classed as 'Minor Work,' subject to a maximum charge on such account of Rs 5,000 in each half-year) surplus profits, after repayment of the guaranteed interest of each half-year, are divided equally between Government and the Company, the interest payments being calculated for the purpose of this division at 1s 10d to the rupee

Rates and fares—Under the contract, Government fixed maximum rates and fares which cannot be altered by Government until the net receipts exceed 10 per cent on the capital outlay. The fixed maxima rates cannot also be altered by the Company without Government sanction. Authority has, however, been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 108]

Number Main head 2
Sub heads (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd*

2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)—*contd*

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Guaranteed interest (converted at current rates of exchange)	Company's share of net earnings (arrived at under terms of contract)	Gain or loss to the State
1879	Rs 8,51,16,162	Rs 71,52,788	Rs 32,13,354	8 76	Rs 43,69,254	Rs 5,83,816	Rs -11,55,900
1880	8,47,31,626	82,41,376	47,34,651	5 58	43,69,254	5,83,816	-8,02,293
1881	8 66,45,418	97,45,183	56,78,755	6 55	43 69 251	8,20,798	+4,78,703
1882	8 75,89,091	1,01,76,190	50,15,619	5 78	43,69,734	8,06,346	-98,461
1883	8 89,91,377	1 19,23,209	67,16,067	7 51	43,38,169	11,44,849	+12,93,049
1884	9,02,69,608	1,21,97,390	68,87,562	7 63	49,99,341	13,17,768	+5,70,453
1885	9,22,58,636	1,31,40,336	74,01,987	8 02	52,35,180	14,57,511	+7,89,257
1886	9,16,82,002	1,35,05,635	78,73,228	8 50	55,87,440	16,07,935	+5,87,803
1887	9 32,12,200	1,21,64,856	69,98,127	7 50	57,17,318	12,6,055	+21,751
1888	9 48,87,818	1,27,33,933	70,48,164	7 45	60,9,893	12,68,879	-2,50,608
1889	9 49,35,797	1,32,31,371	75,41,031	7 91	61,10,257	14,86,390	-55,566
1890	9,53,16,045	1,29,40,370	74,23,195	7 79	51,66,227	14,22,120	+5,34,813
1891	9,55,66,799	1,41,37,769	82,25,170	8 00	58,61,906	18,06,313	+5,56,776
1892	9 55,28,735	1,42,41,178	81,90,959	8 51	65,57,915	17,86,755	-2,18,741
1893	9 62,57,802	1,50,96,045	95,78,044	9 95	66,44,227	25,09,537	+4,24,230
1894	9,77,45,855	1,59,48,184	1,00,70,974	10 30	76,0,071	27,3,713	-2,73,810
1895	9,97,90,965	1,75,58,067	1,09,37,063	10 96	77,03,258	31,37,619	+96,186
1896	10,31,57,107	1,62,03,933	89,00,862	8 60	73,03,618	20,78,128	-4,80,579
1897	10,67,10,220	1,42,61,293	61,70,202	6 09	69,36,853	9,51,545	-14,18,196
1898	10,85,60,144	1,58,62,726	87,42,205	8 05	67,87,071	19,49,477	+5,667
1899	11,10,73,858	1,74,65,045	92,00,3,5	8 15	67,46,668	21,68,722	+3,74,775
1900	11,60,04,044	1,75,93,186	82,28,632	7 08	68,35,449	15,68,577	-1,75,394
1901	11,95,61,022	1,59,38,706	87,52,789	7 32	70,04,560	18,11,890	-62,670
1902	12,18,78,965	1,57,43,536	79,37,622	6 51	71,28,187	12,93,644	-4,94,309
1903	12,37,93,839	1,69,63,028	81,95,201	6 87	72,59,971	15,12,518	-2,77,188
1904	12,44,90,478	1,78,23,863	93,87,312	7 54	73,88,912	18,41,136	+1,09,264
1905	12,52,43,397	1,93,82,065	1,08,90,131	8 70	73,82,579	26,03,049	+9,04,506

TABLE II

Calendar year	Earnings per mile per week	Proportion of expenses to earnings	Calendar year	Earnings per mile per week	Proportion of expenses to earnings	Calendar year	Earnings per mile per week	Proportion of expenses to earnings	Calendar year	Earnings per mile per week	Proportion of expenses to earnings
	Rs			Rs			Rs			Rs	
1860	49	70 17	1872	290	59 97	1884	509	42 95	1896	676	45 07
1861	73	54 97	1873	260	59 23	1885	548	43 11	1897	595	51 63
1863	91	50 14	1874	565	52 12	1886	564	41 12	1898	662	44 89
1863	128	49 51	1875	295	54 41	1887	508	41 89	1899	729	46 81
1864	156	85 33	1876	296	51 74	1888	532	41 11	1900	734	52 50
1865	223	63 83	1877	345	41 97	1889	552	42 44	1901	665	44 06
1866	278	71 93	1878	298	46 61	1890	510	42 06	1902	659	49 60
1867	291	66 56	1879	309	46 97	1891	590	41 23	1903	753	49 46
1868	287	73 66	1880	315	42 57	1892	594	42 92	1904	718	47 12
1869	307	74 32	1881	423	41 04	1893	690	36 55	1905	780	43 78
1870	327	60 54	1882	427	50 76	1894	665	36 85			
1871	300	59 98	1883	497	43 10	1895	782	37 69			

2 (b) Godhra-Rutlam-Nagda railway (5' 6" gauge)—

Details of construction—

This railway is 141·14 miles long Its construction was sanctioned in 1890 and it was opened throughout in 1896

Permanent-way—The permanent-way consists of 75-lb flat-footed steel rails on transverse steel, deodar and creosoted pine sleepers

Ballast—The line is ballasted throughout with broken stone and gravel

Fencing—There are 76½ miles of fencing The rest of the line is unfenced except in station yards.

Curves—The sharpest curve is of 1,000 feet radius

Gradient—The ruling gradient is 1 in 200, with short lengths of 1 in 100 and from 1 in 101 to 1 in 150 between Godhra and Jekot

Terms of contracts—

This is a State line and is worked as a part of the Rajputana-Malwa railway under the contracts and conditions relating to that railway

Statistics of working—

Included with the Rajputana-Malwa railway

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 108]

**Number Main head 2
Sub-heads (a) to (o)** **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd***

2 (c) Nagda-Ujjain railway (5' 6" gauge)—**Details of construction—**

This railway is 34 32 miles long. Its construction was sanctioned in 1891, and it was opened throughout in 1896.

Permanent-way—The permanent-way consists of 75-lb flat-footed steel rails on cast iron oval pot sleepers.

Ballast—The line is ballasted with broken stone.

Fencing—Only station yards are fenced.

Curves—The sharpest curve is of 1,910 feet radius.

Gradients—The ruling gradient is 1 in 200.

Terms of contracts—

The line is owned by the Gwalior State and worked under the following—

Agreement of—15th July 1896 (between His Highness the Maharaja Scindia and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows—

Government aid—Nil. The line is the property of the Scindia State.

Currency of agreement— } The agreement may be terminated at any time on one year's notice from either
Power to determine agreement— } party expiring on the 30th June or 31st December in any year.

Terms of working—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 3' and 3' 6" gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.

Rates and fares—Conform generally with those in force on the Godhra-Rutlam Nagda railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent. on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1895	5,33,560					
1896	10,71,951	40,701	17,762	0.81	49	56.36
1897	22,10,919	1,04,629	47,756	2.15	58	54.36
1898	22,31,596	1,29,627	71,569	3.0	73	44.80
1899	22,31,316	1,17,175	77,732	3.43	83	47.18
1900	22,29,753	2,51,783	1,20,956	5.42	141	51.96
1901	22,31,982	1,12,366	67,208	3.01	63	40.19
1902	22,30,673	1,57,211	85,851	3.83	88	45.30
1903	22,41,230	1,20,951	62,949	2.81	68	47.05
1904	22,41,231	1,20,634	66,111	2.96	69	46.27
1905	22,10,441	1,71,135	99,907	4.46	96	41.72

TABLE II

2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)—**Details of construction—**

This section of the Petlad-Cambay railway is 21 50 miles long. Its construction was sanctioned in 1888, and it was opened throughout in 1901.

Permanent-way—The permanent-way consists of 66½-lb flat-footed steel rails on steel sleepers from Anand to Petlad and on creosoted pine sleepers from Petlad to Tarapur.

Ballast—The line is ballasted with gravel.

Fencing—Thirteen miles, between Anand and Petlad, are fenced. The rest of the line is unfenced, except in station yards.

Curves—The sharpest curve is of 1,433 feet radius.

Gradients—The ruling gradient is 1 in 200.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number ^{Main head 2}
 Sub heads (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)—*concl'd*

Terms of contracts—

The line is owned by the Baroda State and worked under the following —

Agreement of—5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges

The general conditions are as follows —

Government aid—Nil The line is the property of the Baroda State

Currency of agreement— } Either party may terminate the agreement at any time on giving one year's
Power to determine agreement— } notice

Terms of working—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Petlad-Cambay, Gaekwar's Mehsana and Vippar-Kilol-Kadi railways

Rates and fares—To be fixed from time to time by the Company with the approval of His Highness' Government and, as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway

Statistics of working—

TABLE I

CALENDAR YEAR	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	GAEKWAR'S PETLAD, 5' 6'		PETLAD CAMBAY (ANAND TARAPUR SECTION), 5' 6'	
					Earnings per mile per week	Proportion of expenses to earnings	Earnings per mile per week	Proportion of expenses to earnings
1888	Rs 11,030	Rs	Rs		Rs		Rs	
1889	4,71,822							
1890	6,47,922	32,649	20,870	3 22	71	36 08		
1891	7,10,118	59,113	36,346	5 12	85	38 51		
1892	7,11,031	61,243	34,757	4 89	88	43 25		
1893	7,12,768	63,953	40,627	5 70	92	36 47		
1894	7,23,482	69,668	44,037	6 09	100	36 79		
1895	7,23,189	73,891	46,581	6 11	106	36 96		
1896	7,23,616	1,17,540	82,847	11 45	169	29 52		
1897	7,55,769	64,737	33,946	4 19	93	47 56		
1898	7,49,047	51,121	28,156	3 76	74	41 92		
1899	7,52,439	70,668	39,312	5 22	102	44 37		
1900	7,52,097	88,481	41,713	5 55	127	52 86		
1901	11,86,831	93,293	51,769	4 36			101	44 47
1902	11,85,930	1,05,951	56,318	4 79			95	46 37
1903	11,48,092	98,451	50,289	4 38			88	48 92
1904	11,46,552	1,20,974	64,876	5 66			108	46 37
1905	11,31,273	1,40,463	81,966	7 25			126	41 63

2 (e) Petlad Cambay railway (Tarapur-Cambay section) (5' 6" gauge)—

Details of construction—

This section of the Petlad-Cambay railway is 12 31 miles long, which includes the length of 1 39 miles from Cambay to Cambay Bandai, opened in 1906. It was sanctioned in 1893 and was opened to Cambay in 1901.

Permanent-way—The permanent-way consists of 66½-lb flat footed steel rails on creosoted pine sleepers

Ballast—The line is ballasted with gravel

Fencing—Only station yards are fenced

Curves—The sharpest curve is of 1,910 feet radius

Gradients—The ruling gradient is 1 in 600, with a little bit of 1 in 200 between Sayama and Cambay.

Terms of contracts—

The line is owned by the Cambay State and worked under—

Agreement of—17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows —

Government aid—Nil The line is the property of the Cambay State.

Currency of agreement— } The agreement may be terminated at any time on one year's notice from either
Power to determine agreement— } party expiring on the 30th June or 31st December in any year.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number ^{Main head 2}
 Sub heads (a) to (e) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd*

2 (e) Petlad Cambay railway (Tarapur-Cambay section) (5' 6" gauge)—*concl'd*

Terms of contracts—*concl'd*

Terms of working—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Tarapur-Cambay railway.

Rates and fares—To be fixed from time to time by the Company with the approval of the Cambay State and as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

	Calendar year	TABLE I				TABLE II	
		Capital outlay to end of each year	Gross earnings	Net earnings	Per cent. on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
		Rs	Rs	Rs		Rs	
1		7,49,676	12,011	5,950	0 79	40	50 46
2		7,49,676	25,497	13,622	1 81	45	46 57
3		7,49,676	25,151	12,803	1 71	44	49 10
4		7,68,728	32,199	17,276	2 25	57	46 35
5	.	8,06,482	33,638	19,603	2 43	59	41 72

(f) Tapti Valley railway (5' 6" gauge)—

Details of construction—

This railway connects Kankri Khai, a station on the main line of the Bombay, Baroda and Central India railway, with Amalner. It is 155 48 miles long. It was opened in 1900.

Permanent-way—The permanent-way consists of 70-lb flat-footed steel rails on wooden sleepers.

Ballast—The line is ballasted throughout with stone.

Fencing—Only station yards and important level crossings are fenced.

Curves—The sharpest curve is of 1,910 feet radius.

Gradients—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is owned by the Tapti Valley Railway Company and worked under the following contracts—

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintenance and working

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges

The general conditions of the contracts are as follows—

Government aid—A rebate is allowed up to 10 per cent of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Tapti Valley railway, so as to make up an amount equal to interest for the year at the rate of 4 per cent per annum on the actual capital expenditure, plus a sum of Rs 6,000 per annum towards the Company's office expenses and expenses of management. Land in British territory was provided free.

Currency of contracts—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent the total capital expenditure of the Company or be less than such capital expenditure, or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contract—Nil

Terms of working—Government undertake to construct (from funds supplied by the Company), work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2' and 2' 6" gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which may include any single item of capital expenditure, not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 2
Sub heads (a) to (o). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

2 (f) Tapti Valley railway (5' 6" gauge)—*concl'd*

Terms of contracts—*concl'd*

Rates and fares—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway

Statistics of working—

TABLE I

Calen dar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Rebate from B.B & C.I. Ry	Total income	Per cent of total income on capital outlay	Earnings per mile per week	Proportion of expenses to earnings	REMARKS
	Rs	Rs	Rs		Rs	Rs				
1896	8,390									
1897	20,96,294									
1898	60,45,118	2,836								
1899	1,21,09,133	2,42,93								
1900	1,28,31,291	6,68,175								
1901	1,29,18,730	6,00,553	3,42,243	2.65	33,226	3,75,469	2.90	74	43.01	The net earnings for 1898, 1899 and 1st half of 1900 were credited to interest on capital and those for 2nd half of 1900 (including re- bate) were treated as a set off against the charge to capital for interest in the accounts for 1st half of 1901
1902	1,29,70,581	8,26,485	4,64,212	3.7	45,196	5,08,438	3.92	102	43.95	
1903	1,30,02,400	8,62,753	4,83,142	3.72	40,258	5,23,400	4.03	107	44.00	
1904	1,30,77,018	6,58,740	3,68,891	2.82	28,441	3,97,335	3.04	81	44.00	
1905	1,30,83,679	10,11,222	5,86,921	4.49	2,928	5,89,849	4.51	125	41.95	

2 (g) Ahmedabad-Dholka railway (3' 3½" gauge)—

Details of construction—

This railway connects Sabarmati, a station on the Rajputana-Malwa railway, with Dholka. It is 33.50 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Permanent-way—The permanent-way consists of 41½-lb flat footed steel rails on deodar sleepers.

Ballast—Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and level crossings.

Fencing—Only station yards are fenced.

Curves—The sharpest curve is of 1,146 feet radius.

Gradients—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts—

Contracts of—25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction

18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working

The general conditions of the contracts are as follows—

Government aid—A rebate is allowed up to 10 per cent of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent per annum on the actual capital expenditure plus Rs 5,000 per annum towards the Company's office expenses and expenses of management. Land provided free.

Currency of contracts—Government may, by giving 12 months' notice, determine the contracts on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent the total capital expenditure of the Company, nor being less than such capital expenditure.

Power of Company to surrender contracts—Nil

Terms of working—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, proportionate to its total earnings, but not exceeding 44 per cent of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.

Rates and fares—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the undertaking.

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 2
Sub-heads (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

2 (g) Ahmedabad-Dholka railway (3' 3 $\frac{1}{2}$ " gauge)—*concl'd*

Statistics of working—

Calendar year	TABLE I							TABLE II		
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Rebate from Bom- bay, Baroda and Central India railway	Total income	Per cent of total income on capital outlay	Earnings per mile per week	Pro of exp to earnings	
1903	Rs 10,13,420	Rs 64,261	Rs 35,986	3 55	Rs	Rs 35,986	3 55	Rs 45	44 00	
1904	10,17,308	99,044	55,465	5 45		55,465	5 45	57	44 00	
1905	10,44,975	98,214	57,203	5 47		57,203	5 47	50	41 76	

2 (h) Ahmedabad-Parantij railway (3' 3 $\frac{1}{2}$ " gauge)—

Details of construction—

This railway connects Ahmedabad, a station on the Bombay, Baroda and Central India railway, with Idar Road It is 54 70 miles long Its construction was sanctioned in 1896 and it was opened in 1897

Permanent-way—The permanent-way consists of 41 $\frac{1}{2}$ -lb flat-footed steel rails on creosoted pine and deodar sleepers

Ballast—The line is ballasted with kunkur, sand and stone

Fencing—Only station yards are fenced

Curves—The sharpest curve is of 1,146 feet radius

Gradients—The ruling gradient is 1 in 150

Terms of contracts—

The Ahmedabad-Parantij railway is worked under the following contracts—

Contracts of—13th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction

4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges

The general conditions of the contracts are as follows—

Government aid—A rebate is allowed up to 10 per cent of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent per annum on the actual capital expenditure, plus Rs 5,000 per annum towards the Company's office expenses and expenses of management Land provided free

Currency of contracts—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent the total capital expenditure of the Company, not being less than such capital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure

Power of Company to surrender contracts—Nil

Terms of working—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year) excluding the 2 and 2' 6" gauge lines, proportionate to its total earnings but not exceeding 41 per cent of its gross earnings for the year The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company

Rates and fares—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana Malwa railway

Statistics of working—

Calendar year	TABLE I							TABLE II		
	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Rebate from B, B & C I Ry	Total income	Per cent of total income on capital out- lay	Earnings per mile per week	Pro of exp to earn- ings	
1896	Rs 13,12,752	Rs	Rs		Rs	Rs		Rs		
1897	19,42,211	69,069	36,669	1 89		36,665	1 89	46	46 92	
1898	19,42,971	1,49,790	8,836	4 42		85,836	4 42	33	42 70	
1899	19,49,616	2,10,634	1,21,637	6 24		1,21,637	6 24	74	42 23	
1900	19 5,305	2 65 10,	1,55,952	7 93		1,55,952	7 93	93	41 17	
1901	19 49,955	1,77,438	99,365	5 10		99,365	5 10	62	41 00	
1902	19,70,012	1,70,794	1,00,085	5 11		1,00,685	5 11	63	40 01	
1903	19 88,859	1 50,112	84,063	4 45		84,063	4 45	53	44 00	
1904	19 89,045	1 86,227	1 04,287	5 24		1,04,287	5 24	65	44 00	
1905	19 91,753	1 98,713	1 15,461	5 80		1 15,464	5 80	70	41 69	

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 2
Sub heads (a) to (e) — BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd*

2 (i) Gaekwar's Mehsana railway (3' 3½" gauge)—

Details of construction—

The total length of this railway is 92 63 miles. It consists of three branches, Mehsana to Kheralu, 27 73 miles, Mehsana to Viramgam, 40 21 miles, and Mehsana to Patan, 24 69 miles. The first branch was opened throughout in 1888 and the other two in 1891.

Besides the above 38 11 miles were sanctioned for construction in 1905.

Permanent-way—The Kheralu and Viramgam branches are laid with 41½-lb flat-footed steel rails on transverse steel and deodar sleepers. The Mehsana-Patan section is laid with 40-lb iron rails on deodar sleepers, except in station yards and for the first 3 miles which are laid with 41½-lb steel rails.

Ballast—The line between Mehsana and Kheralu is ballasted with sand and the rest with kunkur.

Fencing—The whole line, except 41½ miles which are fenced by wire, was originally fenced with cactus, but this has in several places been entirely destroyed by floods and locusts and what remains is much broken up.

Curves—The sharpest curve is of 1,910 feet radius.

Gradients—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following—

Agreement of—1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay
1887	Rs 13,55,492	Rs 27,890	Rs 5,561	0 41
1888	9,16,565	47,502	16,672	1 82
1889	11,18,446	50,90	20,348	1 82
1890	25,44,310	50,241	23,903	0 92
1891	29,04,000	1,94,247	1,05,801	3 61
1892	29,71,610	2,58,963	1,53,005	5 15
1893	30,26,752	3,10,89	1,98,250	6 55
1894	30,94,578	3,79,972	2,36,387	7 04
1895	32,55,941	3,88,444	2,02,410	6 22
1896	32,61,448	4,23,283	2,71,262	8 32
1897	32,62,910	3,89,125	1,18,353	3 63
1898	32,82,612	4,16,491	1,90,052	6 07
1899	32,83,612	3,71,160	2,16,654	6 60
1900	33,01,950	4,28,545	2,36,754	7 17
1901	33,49,911	3,92,227	2,15,111	6 42
1902	33,61,229	3,74,615	1,98,97	5 42
1903	33,78,132	3,47,083	1,77,466	5 25
1904	33,89,778	3,62,249	2,01,906	6 06
1905	34,68,5	4,51,184	2,62,904	7 65

TABLE II

	Earnings per mile per week	Pro of exp to earnings
Rs		
93	49	45 53
43	54	40 92
37	70	41 12
41	79	37 79
40 66	70	40 18
45 91	88	35 91
16 58	70	42 55
42 40	79	42 40
44 75	89	44 75
45 16	81	45 16
46 87	78	46 87
48 87	72	48 87
46 39	79	46 39
41 86	94	41 86

2 (j) Jaipur (Siwai Madhopur) railway (3' 3½" gauge)—

Details of construction—

From Jaipur the Rajputana-Malwa railway is utilized as far as Singneri, from which station this railway actually starts. The open mileage (Singneri to Nawai) is 32 18 miles. It was sanctioned in 1897 and was opened in 1905.

There are 40 67 miles still under construction.

Permanent-way—The permanent-way consists of 41½-lb flat footed steel rails laid on deodar sleepers.

Ballast—The line is ballasted with stone.

Fencing—The line is unfenced except at stations and at points where the line crosses the main road.

Curves—The sharpest curve is of 2,865 feet radius.

Gradients—The limiting gradient is 1 in 250 in the down direction and 1 in 200 in the up direction.

Terms of contract—

These are under consideration.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of the year	Gross earnings	Net earnings	Per cent on capital outlay
1905	Rs 27,57,143	Rs 12,299	Rs 6,779	0 25

TABLE II

	Earnings per mile per week	Proportion of expenses to earnings
Rs	52	44 88

2 (k) Palanpur-Deesa railway (3' 3½" gauge)—

Details of construction—

This railway is 17 28 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way—The permanent way consists of 40 lb flat footed iron rails, except in station yards and the first 3 miles of line which are laid with 11½-lb steel rails. The rails are laid on Denham-Olpherts' plate, cast iron pot, and steel dish cover sleepers.

APPENDIX 38—*contd.**History of railways constructed and in progress*
[For Index see page 106]

Number Main head 2
Sub heads (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

2 (l) Palanpur-Deesa railway (3' 3½" gauge)—*concl'd*

Details of construction—*concl'd*

Ballast—The line is ballasted with stone and sand.

Fencing—The line is fenced throughout

Curves—The sharpest curve is of 1,910 feet radius

Gradients—The ruling gradient is 1 in 150

Terms of contracts—

The railway is worked under—

Terms contained in letter No 44 Ry, dated the 30th March 1892, from the Government of India to the Secretary of State, and letter No 62 Ry, dated the 23rd June 1892, from the Secretary of State to the Government of India

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges

The general conditions are as follows—

Government aid—The line is owned jointly by Government and the Palanpur Durbar

Currency of contract—The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice

Power of Company to surrender contract—Nil

Terms of working—The railway is debited with a share of the working expenses of the system, excluding the 2' and 2' 6" gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each after excluding from the Government capital the sum of Rs 25,117, the extra expenditure incurred in providing a 5' 6" gauge sub structure

Rates and fares—Same as on the Rajputana Malwa railway

Statistics of working—

TABLE I

Calendar year	PALANPUR DEESA (NATIVE STATE SECTION)				PALANPUR DEESA (BRITISH SECTION)						TABLE II.	
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Pro of exp to earnings
1892	20,000				Rs 4,746				Rs 1,031	—1,031		
1893	1,85,000	2,245	1,335	0.72	1,78,953	2,181	1,110	0.63	Rs 5,371	—4,261	33	44.87
1894	1,85,000	17,381	11,365	6.14	2,14,601	20,163	11,781	5.49	Rs 8,783	+2,993	4	38.45
1895	1,85,000	17,613	11,333	6.13	2,15,374	20,579	11,512	5.35	Rs 8,378	+3,134	42	40.17
1896	1,85,000	22,864	14,101	7.62	2,32,746	28,765	15,722	6.47	Rs 9,149	+5,923	57	43.50
1897	1,85,000	19,133	10,883	5.88	2,33,264	24,131	12,212	5.25	Rs 9,305	+2,978	48	46.55
1898	1,85,000	16,893	10,334	5.59	2,33,761	21,306	11,625	4.99	Rs 9,331	+2,997	43	42.50
1899	1,85,000	19,739	12,102	6.54	2,33,211	24,89	13,618	5.84	Rs 9,300	+4,288	50	42.37
1900	1,85,000	21,084	14,238	7.70	2,33,264	26,585	12,616	5.41	Rs 9,330	+3,286	53	43.66
1901	1,85,000	16,279	9,375	5.07	2,33,264	20,526	10,48	4.52	Rs 9,330	+1,218	41	45.87
1902	1,85,000	14,777	8,120	4.50	2,36,76	18,913	8,30	3.52	Rs 9,108	—1,078	37	47.01
1903	1,85,000	13,013	7,423	4.01	2,37,069	16,01	7,593	3.38	Rs 9,432	—1,134	33	48.47
1904	1,85,000	12,797	7,250	3.94	2,37,069	16,993	8,349	3.2	Rs 9,171	—1,134	32	46.43
1905	1,85,000	16,395	9,169	5.12	2,37,069	18,783	10,48	4.58	Rs 9,172	+1,376	39	42.24

2 (l) Rajputana-Malwa railway (3' 3½" gauge)—

The Maharaja Holkar lent the British Government one hundred lakhs of rupees at 4½ per cent per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits

The Maharaja Scindia lent the British Government seventy-five lakhs of rupees at 4 per cent per annum for the construction of the Indore-Narmuch section and the branch to Ujjain

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company since the 1st January 1885

Details of construction—

The open mileage of the Rajputana-Malwa railway is 1,782.38 miles. It is made up of the following sections—

(1) *Rajputana section*, main line (Delhi to Ahmedabad), 539.37 miles, Rewari-Bandikui Phulka loop 173.89 miles; and branches, 139.28 miles, (2) *Malwa section*, main line (Khandwa to Ajmer), 39.19 miles, branch, 14.28 miles, (3) *Cawnpore-Achnera section*, main line (Cawnpore to Achnera), 239.17 miles, branches, 21.33 miles, (4) *Rewari-Fazilka section*, 261.57 miles

The Rajputana section was sanctioned in 1870 and was opened in 1881, the Malwa section was sanctioned in 1872, opened in 1881, the Cawnpore-Achnera section was sanctioned in 1874, opened in 1884, and the Rewari-Fazilka section was sanctioned in 1881, opened in 1885. 2.92 miles of the line are double track

Permanent-way—The Rajputana section is laid with 50 lb flat-footed steel rails on deodar sleepers. The Malwa section has mixed 40-lb iron, 41½-lb and 50-lb steel flat-footed rails on deodar sleepers. The Cawnpore-Achnera section has 41½-lb and 50-lb steel rails on deodar sleepers. The Rewari-Fazilka section has 41½-lb steel rails on deodar sleepers.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 2
Sub-heads (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

2 (i) Rajputana-Malwa railway (3' 3½" gauge)—*contd.*Details of construction—*contd.**Ballast*—The line is ballasted throughout with stone, kunkur, sand and hard quartz*Fencing*—The total length of line fenced on the Rajputana section is 669 miles. The Malwa section is fenced for 93½ miles and at stations. The Cawnpore-Achnera section is fenced on both sides for 145½ miles on the main line, except for 7½ miles which are fenced on one side only. The Soron branch is fenced for 8½ miles and the Brindaban branch for 3½ miles. The Rewari-Bhatinda-Fazilka section is fenced for about 113½ miles and at stations. On the Rewari Phuleria section only the Narnaul station yard is fenced.*Curves*—The sharpest curve is of 600 feet radius*Gradients*—The ruling gradient is 1 in 150, except on the Malwa section between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Panj where it is 1 in 40.

Terms of contracts—

The Rajputana-Malwa and Godhra-Rutlam Nagda railways are worked together as one undertaking under the following contracts—

Contracts of—24th September 1884—The original contract (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway

16th March 1888—Contract supplemental to that of 1884 for maintaining and working the Cawnpore-Achnera railway as a part of the Rajputana-Malwa railway

8th November 1889—Contract supplemental to those of 1884 and 1888 for maintaining and working the Brindaban branch as a part of the Cawnpore-Achnera railway

5th October 1893—Supplemental to the original contract for maintaining and working the Godhra-Rutlam railway is a part of the Rajputana-Malwa railway

1st October 1897—Supplemental to those of 1884 and 1893 for maintaining and working the Rutlam-Nagda railway is a part of the Godhra-Rutlam railway

1st February 1901—Supplemental to those of 1881 and 1888 modifying the terms as to the division of working expenses

The general conditions of the contracts are as follows—

Government aid—The line is the property of Government*Currency of contracts*—The duration of the contracts is up to the 31st December 1905*Power of company to surrender contracts*—Nil*Terms of working*—The working expenses of the system (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as 'Minor Work' subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year, and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), excluding 2' and 2' 6" gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3' 3½" gauge, and Godhra-Rutlam-Nagda, 5' 6" gauge, railways, are paid in full to Government.*Rates and fares*—Maximum and minimum rates and fares have been fixed within which the Company is authorised to vary the rates*Statistics of working*—

TABLE I (including the Godhra-Rutlam-Nagda railway)

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Company's share of net earnings	Gain or loss to the State
1879	Rs 7,06,47,64	Rs 38,64,907	Rs 15,41,903	2 18	Rs 28,43,439	Rs 8,01,536	-
1880	8,38,67,014	59,12,511	17,33,711	2 07	35,81,419	-18,47,735	-
1881	9,30,43,645	94,70,410	35,96,014	3 86	37,45,505	-1,52,461	-
1882	9,94,83,913	114,82,614	52,84,668	5 31	38,74,919	+14,09,749	-
1883	11,08,57,933	135,64,166	63,39,203	5 72	40,74,808	+22,64,400	-
1884	11,92,03,595	1,46,20,446	61,92,677	5 19	43,90,548	+18,02,129	-
1885	12,22,63,117	1,73,00,501	79,71,964	6 52	49,10,379	+30,61,585	-
1886	12,80,59,107	1,82,98,610	89,55,549	6 99	51,72,731	+31,54,764	-
1887	12,8,69,467	1,65,28,203	81,24,547	6 31	51,86,578	+24,31,779	-
1888	12,96,59,656	1,86,14,714	96,31,727	7 43	52,27,345	+39,04,174	-
1889	13,02,53,556	1,99,40,005	91,32,783	7 01	52,48,893	8,56,110	+30,27,785
1890	13,00,01,510	1,74,28,281	86,42,525	6 65	52,61,288	6,57,951	+27,23,256
1891	13,17,20,440	2,17,89,570	1,23,17,065	9 35	53,13,844	8,78,535	+61,24,386
1892	14,31,21,072	2,24,00,454	1,32,14,774	9 21	56,14,176	13,47,763	+62,51,835
1893	14,30,06,325	2,26,33,265	1,33,25,640	9 32	57,00,803	13,24,918	+62,99,914
1894	14,72,89,588	2,51,41,200	1,54,75,342	10 51	59,77,844	15,63,148	+80,31,350
1895	15,55,56,871	2,45,42,974	1,44,02,338	9 26	59,78,606	16,21,685	+68,02,117
1896	15,03,08,948	2,10,21,002	1,13,79,807	7 57	60,63,212	9,93,351	+43,23,214
1897	14,94,51,054	1,84,74,958	1,00,97,008	6 76	60,48,581	5,09,720	+35,38,707
1898	15,03,74,730	2,23,17,815	1,19,05,991	7 91	60,77,309	9,58,967	+48,74,715
1899	15,14,26,773	2,60,94,541	1,47,90,148	9 73	60,92,658	9,02,964	+76,45,126
1900	15,31,25,211	2,91,75,054	1,60,55,070	10 48	61,35,151	21,67,610	+77,52,289
1901	15,49,58,624	2,78,02,296	1,48,89,615	9 65	61,89,498	13,785	+86,86,862
1902	15,61,35,445	2,58,98,694	1,36,25,409	8 71	62,89,315	5,04,094	+73,45,094
1903	15,78,84,717	2,37,25,661	1,12,42,360	7 18	62,84,957	5,644	+50,51,759
1904	16,17,91,653	2,33,65,288	1,21,57,833	7 52	64,55,047	..	+57,02,786
1905	16,28,48,528	2,81,41,213	1,62,29,896	9 97	64,41,437	..	+97,88,459

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 2
Sub heads (a) to (o) • BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd*

2 (l) Rajputana-Malwa railway (3' 3½" gauge)—*concl*Statistics of working—*concl*

TABLE II

Calen dar year	Rajputana Malwa, 3' 3½"	Holkar and Sindia Nemuch, 3' 3½"	Western Rajputana, 3' 3½"	Bawali Feroze pore 3' 3½"	Muttra Hathras, 3' 3½"	Cawnpore Tarakhabad, 3' 3½"	Muttra Achnera, 3' 3½"	Cawnpore Achnera, 3' 3½"	Godhra Rutlam Nagda, 5' 6"	
	Earn ings per mile per week	Pro of exp to earn ings	Farn ings per mile per week	Pro of exp to earn ings	Earn ings per mile per week	Pro of exp to earn ings	Earn ings per mile per week	Pro of exp to earn ings	Earn ings per mile per week	
1873	Rs 32	96 59	Rs		Rs		Rs		Rs	
1874	69	60 37	60	84 02						
1875	93	64 04	123	91 71	"	108	58 18			
1876	114	65 40	99	92 87		59	57 74			
1877	130	67 9	86	76 86		66	54 86			
1878	136	61 97	122	67 50		65	53 33			
1879	153	66 74	128	71 53	86 03	83	51 97			
1880	152	66 88	118	74 74	151	85 9	89	57 35		
1881	189	60 41	132	69 11		90	69 19	18 233 15		
1882	188	53 07				84	76 97	65 67 36	39 57	89 01 86 42
1883	219	52 18			75	81 28	Incl uded with Cawnpore Achnera		80	63 98
1884	223	56 92			96	67 28			81	69 17
1885	224	52 81							70	87 87
1886	212	50 27								
1887	191	50 84								
1888	215	48 26								
1889	230	45 82								
1890	200	50 41								
1891	21	43 47								
1892	257	41 01								
1893	259	41 12								50 41 61
1894	285	38 19								106 40 64
1895	269	46 29								181 57 01
1896	227	41 35								189 63 27
1897	212	46 60								146 72 02
1898	241	42 83								181 51 14
1899	235	42 06								172 53 34
1900	317	43 18								219 46 84
1901	313	46 29								156 45 15
1902	291	47 54								140 46 27
1903	253	49 16								147 48 29
1904	260	47 63								158 47 62
1905	296	42 95								224 42 78

2. (m) Vijapur-Kalol-Kadi railway (3' 3½" gauge)—

Details of construction—

This railway is 41 37 miles long. Its construction was sanctioned in 1899 and it was opened in 1903.

Permanent-way—16 miles are laid with 41½ lb flat-footed steel rails and 25 miles with 40-lb flat-footed iron rails on deodar sleepers.

Ballast—The line is ballasted with broken stone and shingle.

Fencing—Only station yards and 11 07 miles of the Vijapur-Kalol section are fenced.

Curves—The sharpest curve is of 3,820 feet radius.

Gradients—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following—

Agreement of—23rd November 1903 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Pro of exp to earnings
1899	Rs 7,534	Rs	Rs		Rs	
1900	29,885					
1901	6,60 716					
1902	10,47,188	19,514	9,226	1 18	23	52 72
1903	11,84,46	56,916	28,752	2 43	81	49 43
1904	13,35,402	74,572	40,083	3 00	35	46 25
1905	15,15,766	87,131	50,496	3 88	40	42 05

TABLE II

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 2
Sub heads (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

2 (n) Gaekwar's Dabhoi railway (2' 6" gauge)—

Details of construction—

The total length of the railway is 94 49 miles. It consists of three sections, Miyagam to Chandod, 30 62 miles, Dabhoi to Bodeli, 22 41 miles, and Dabhoi to Masor Road, 41 48 miles. The construction of these sections was first sanctioned in 1872, 1877 and 1879, respectively, and they were opened throughout in 1879, 1890 and 1904, respectively.

Permanent way—The line is laid with 31-lb. flat-footed steel rails on wooden sleepers, but there are still about 5 miles of 28-lb iron rails in the road.

Ballast—The line is chiefly ballasted with sand.

Fencing—The line is practically unfenced except in station yards.

Curves—The sharpest curve is of 500 feet radius.

Gradients—The ruling gradient is 1 in 400, with small lengths of 1 in 200 and 1 in 300.

Terms of contracts—

The line is owned by the Baroda State and worked under—

Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows—

Government aid—Nil. The line is the property of the Baroda State.

Currency of agreement—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th June or 31st December.

Terms of working—The Company work the railway at actual cost, plus 12½ per cent of total working expenses (but not less than Rs 500 per mensem or more than Rs 800 per mensem, in a half-year) for superintendence.

Rates and fares—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible must conform generally with those in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay
1879	Rs 9,62,450	Rs 72,083	Rs 31,608	3 28
1880	11,65,510	1,23,825	65,193	5 59
1881	12,57,448	1,41,233	48,819	3 88
1882	12,78,042	1,44,022	46,717	3 66
1883	12,73,630	1,46,970	38,855	3 05
1884	12,80,171	1,49,691	48,560	3 80
1885	13,11,229	1,52,383	55,623	4 21
1886	13,58,502	1,55,699	39,393	2 90
1887	13,46,259	1,56,352	47,939	3 52
1888	13,74,295	1,45,757	43,854	3 19
1889	16,10,398	1,42,989	49,393	3 07
1890	17,53,877	1,93,028	74,570	4 25
1891	17,91,157	2,01,165	68,126	3 60
1892	18,47,403	8,38,009	1,06,510	5 77
1893	18,55,158	2,52,106	1,32,507	7 14
1894	18,88,774	2,40,316	95,429	5 05
1895	19,08,757	2,34,473	96,764	5 02
1896	20,74,776	2,58,788	1,25,657	6 06
1897	21,08,574	2,20,901	50,949	2 42
1898	21,18,491	2,10,240	-26,592	
1899	21,17,586	2,45,974	87,571	4 14
1900	21,17,28	2,35,281	61,605	5 44
1901	21,14,302	2,53,936	73,427	3 47
1902	22,34,829	2,22,573	76,367	3 62
1903	23,60,528	2,60,550	7,467	0 32
1904	24,64,882	2,98,906	1,26,426	5 13
1905	24,72,909	3,72,167	2,01,004	8 25

TABLE II

Calendar year	Earnings per mile per week	Per cent on earnings
1878	Rs. 21	98 34
1879	32	7 78
1880	33	78 11
1881	38	75 35
1882	45	78 20
1883	43	62 42
1884	46	56 15
1885	51	49 44
1886	46	65 41
1887	47	67 54
1888	48	78 75
1889	49	67 43
1890	50	63 47
1891	50	74 37
1892	51	69 73
1893	48	69 91
1894	47	65 45
1895	57	61 76
1896	54	66 13
1897	64	55 36
1898	51	47 44
1899	60	60 29
1900	57	58 73
1901	62	51 44
1902	54	76 94
1903	60	112 65
1904	65	64 40
1905	76	73 82
		71 08
		65 69
		97 18

The decrease in net earnings in 1903 was due principally to the cost of 3 engines having been charged to Revenue

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number ^{Main head 2}
_{Sub-heads (a) to (e)} BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concl'd*

2 (e) Rajpipla railway (2' 6" gauge)—

Details of construction—

This line, which connects Ankleswar with Nandod, is 37 37 miles long. Its construction was sanctioned in 1894 and it was opened in 1899.

Permanent-way—The line is laid with 41½-lb flat-footed steel rails on half-round jungle teak sleepers.

Ballast—The line is chiefly ballasted with coarse river sand.

Fencing—Only the station yards and small lengths at miles 4 and 9 are fenced.

Curves—The sharpest curve is of 1,492 feet radius.

Gradients—The ruling gradient is 1 in 150.

Terms of contracts—

The line is owned by the Rajpipla State and is worked under—

Agreement of—19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company.

The general conditions of the agreement are as follows—

Government aid—Nil. The line is the property of the Rajpipla State.

Currency of agreement—The agreement may be terminated by either party on the expiration of three years or at the end of any calendar half-year thereafter, on one year's notice from either side.

Terms of working—The Rajpipla State is debited with the actual cost of working, and in addition one per cent on the net earnings of the Rajpipla railway as contribution to the Provident Fund and 12½ per cent on total working expenses (but not less than Rs 300 per mensem or more than Rs 800 per mensem) for superintendence.

Rates and fares—To be fixed from time to time by the Company with the approval of the Rajpipla State, and to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Pro. of exp to earnings
1894	Rs 12,674	Rs	Rs		Rs	
1895	77,264					
1896	4,00 141					
1897	7,55 791	5,705	-6,534		11	214 53
1898	11,03 333	10,621	-9,172		11	186 53
1899	13,07,820	35,809	8,478	0 65	22	76 32
1900	13,10,159	49,463	12,139	0 93	25	75 46
1901	13,06,822	47,182	10,487	0 80	24	77 77
1902	13,05,415	39,726	10,131	0 78	20	73 81
1903	13,01,281	41,830	10,674	0 62	23	76 19
1904	13,04,532	49,207	16,810	1 29	25	69 68
1905	13,01,522	62,017	28,194	2 16	32	54 54

TABLE II

Number ^{Main head 3}
_{Sub-heads (a) to (d)} EASTERN BENGAL (STATE) RAILWAY SYSTEM—

Lines comprising the system—The Eastern Bengal (State) railway system is made up of—

	Open line Miles	Under construction or sanctioned for construction Miles	Total Miles
(a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)	497 95	11 00	508 95
Eastern Bengal (State) railway, Northern, Behar, Dacca and Karma Dhubri sections (3' 6½" gauge)	682 00	263 12	945 12
(b) branches and "British" section o ("Cesta Kurigram (2' 6" gauge))	55 03		55 03
(c) Mymensingh Jamalpur Jagannath	50 69		50 69
(d) Cooch Behar railway (2' 6" gauge)	33 60		33 60
Total	1,319 27	274 12	1,593 39

Running powers—

Foreign line over home line—
East Indian railway { Naihati to Bara Bridge Junction } for goods trains only . { 82 75
Canal Junction to Chitpore } { 1 75
34 50 }

3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)—

Details of construction—

The open mileage of the standard gauge portion of this system amounts to 497 95 miles, which may be divided into (1) *Eastern section*, main line, 145 07 miles, branches, 154 87 miles, (2) *Southern section*, main line, 29 20 miles, branches 41 62 miles, (3) *Central section*, main line, 104 51 miles, branches, 23 18 miles. There are 112 21 miles of double line. Besides the above there are under construction 8 75 miles of single, and 2 25 miles of double line, and 2 99 miles of double line are being quadrupled.

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number ^{Main head 3}
_{Sub heads (a) to (d)} EASTERN BENGAL (STATE) RAILWAY SYSTEM—*contd*3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (3' 6" gauge)—*concl'd*Details of construction—*concl'd*

Sanction was first given to the construction of the above mentioned sections of the Eastern Bengal (State) railway in 1859, 1862 and 1881, respectively, and they were opened throughout in 1871, 1863 and 1884.

Permanent way—The permanent way on the double line portion of the Eastern section consists of 73 lb and 75-lb double headed steel rails, with Denham-Olpherts' cast iron sleepers, except on the length between Calcutta and Naihati which is laid with 85 lb bull-headed steel rails, with sal and jirrah sleepers at the joints. The single line portion of the Eastern section is also laid chiefly with 73-lb and 75 lb double headed steel rails, the greater part on Denham and Olpherts' cast iron sleepers and the remainder on cast iron bowl and sal wood sleepers. The Murshidabad branch is laid with 75-lb new pattern flat-footed steel rails on sal sleepers.

The double line portion of the Southern section and the Budge Budge branch are laid with 73 lb double-headed steel rails on Denham and Olpherts' cast iron sleepers. The single line of the Southern section consists of 72 lb and 73-lb double headed iron and steel rails mostly on Denham and Olpherts' cast iron sleepers. The Diamond Harbour branch is laid with 64 lb and 73-lb double-headed steel rails mostly on Denham and Olpherts' cast iron sleepers.

The Central section is laid with flat footed steel rails 62 lbs to the yard on sal sleepers.

Ballast—The main line is ballasted throughout with brick ballast. Where 85 lb bull-headed rails have been laid, brick ballast has been replaced by stone, and it is intended to stone ballast all track laid with 85-lb rails.

Fencing—The whole of the Eastern section is fenced, except between Pinchuria Junction and Gorakundo, and the Faridpur branch. The Southern section is fenced as far as Sonarpur, beyond Sonarpur to Canning there is no fencing. The Diamond Harbour and Budge Budge branches are fenced. The Central section is fenced throughout.

Curves—The sharpest curve is of 1,000 feet radius.

Gradients—The ruling gradient is 1 in 300.

Terms of contracts—Nil. The line is owned and worked by the State.

Statistics of working—See pages 125 and 126.

3 (b) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3' 3½" gauge)—

Details of construction—

The metre gauge section comprises an open mileage of 682.00 miles and may be divided into (1) *Northern section*, main line, 196.85 miles, branches, 116.46 miles, (2) *Behar section*, main line, 84.86 miles, branches, 102.42 miles, (3) *Dacca section*, 85.92 miles, (4) *Kaunia-Dhubri section*, main line, 51.02 miles and extension, 1+47 miles.

In addition to the above 263.12 miles are under construction.

Sanction was first given to the construction of the above mentioned sections in 1871, 1881, 1882 and 1899, respectively, and they were opened through in 1878, 1889, 1885 and 1902.

Permanent way—The permanent-way consists of flat footed steel rails, weighing 50 lbs and 11½ lbs per yard, on s. sleepers. On the Northern section, Sua to Siliguri, and the Brahmaputra-Sonarpur branch and on the Kaunia Bonarpur extension of the Kaunia-Dhubri section, the rails are 50 lb. On the Behar and Kaunia-Dhubri sections, Manikarni ghat & Dhubri, the greater part of the rails are 50-lb, and the remainder are 41½-lb. On the Kosi branch and the Dacca section the rails are all 41½-lb. On the Barsoi-Kissengunge branch the rails are mostly flat-footed iron, 40 lbs per yard, the remainder being 41½-lb steel. The sleepers are mostly sal, but there are also metal sleepers of various types.

Ballast—The whole of the line, except the portion from Golakganj Junction to Dhubri and the Kaunia-Bonarpur extension, is ballasted or shortly to be ballasted. The ballast is brick, stone and shingle.

Fencing—The whole of the 3' 3½" gauge lines are fenced except the Brahmaputra-Sonarpur and Barsoi-Kissengunge branches, the Kaunia-Bonarpur extension and the portions from Golakganj Junction to Dhubri and Dacca to Mymensingh.

Curves—The sharpest curve is of 1,416 feet radius.

Gradients—The ruling gradient is 1 in 200.

Terms of contracts—The line is owned and worked by the State.

Statistics of working—See pages 125 and 126.

3 (b) Eastern Bengal (State) railway, Ranaghat-Krishnagar and Teesta Kurigram branches, and the British section & the Santabarai extension (2' 6" gauge)—

The Teesta-Kurigram branch was originally a portion of the 2' 6" gauge lines from Teesta Junction to Mogulhat in Jatrapur, known as the Kaunia Dhulia branch. The line from Teesta Junction to Mogulhat has been converted to the 3' 3½" gauge to form an integral part of the "Kaunia-Dhubri section". The line from Kurigram to Jatrapur has been abandoned. The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal (State) railway system from 1st July 1904.

Details of construction—

The Ranaghat Krishnagar branch is 20.25 miles long. Its construction was sanctioned in 1895 and it was opened in 1899.

The Teesta-Kurigram branch is 14.99 miles long, it was opened in 1881.

The British section of the Santabarai extension of the Cooch Behar State railway is 19.79 miles long. Its construction was sanctioned in 1897 and it was opened in 1901.

Permanent-way—On the Ranaghat-Krishnagar and Teesta-Kurigram branches the rails are flat footed steel, 25 lbs per yard, the sleepers are pyinando and sal. On the Santabarai extension the rails are flat-footed iron, 40 lbs per yard and flat-footed steel, 41½ lbs per yard, laid on sal sleepers.

Ballast—The Ranaghat Krishnagar branch is brick ballasted, the Teesta-Kurigram branch is not ballasted, and the Santabarai extension is now being ballasted with stone.

Fencing—No lines on the 2' 6" gauge are fenced.

Curves—The sharpest curve is of 500 feet radius.

Gradients—No grade on the Ranaghat-Krishnagar and Teesta-Kurigram branches exceeds 1 in 200. On the Santabarai extension the ruling gradient is 1 in 100, and there is a short grade of 1 in 50 near the terminus (Janti).

Terms of contracts—The line is owned and worked by the State.

Statistics of working—See pages 125 and 126.

APPENDIX 38—contd.

History of railways constructed and in progress.
[For Index see page 106]

Number Main head 3
Sub heads (a) to (d) EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd.

3 (a) and (b) Eastern Bengal (State) railway (5' 6", 3 3/8" and 2' 6" gauge sections)—contd.
Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Interest	Annuity	Company's share of surplus profits	Gain or loss to the State	REMARKS
1879	Rs 6,23,44,476	Rs 60,29,2 2	Rs 25,79,314	4 14	Rs 28,51,165	Rs	Rs 1,67,926	Rs -6,39,177	
1880	6,30,72,304	66,91,060	33,75,186	5 33	29,27,692		1,34,900	-87,4 6	
1881	6,39,51,900	77,05,736	42,86,406	6 70	28,50,922		8,24,125	+ 6,11,339	
1882	6,50,12,546	85,79,404	47,1,459	7 26	27,9,407		8,9,329	+ 10,29,523	
1883	7,01,8,023	80,77,465	4,10,716	6 70	29,48,783		4,03,213	+ 12,63,710	
1884	6,58,68,000	78,12,9,9	21,80,526	3 77	15,92,486	3,09,920		+ 5,37,120	
1885	7,31,60,273	72,5,916	25,25,336	3 45	21,82,794	7,22,920		-3,80,378	
1886	8,00,56,752	87,73,918	30,89,770	3 86	24,34,239	19,04,750		-12,49,269	
1887	8,11,53,166	91,70,931	45,01,782	5 55	41,71,008	14,90,152		-11,56,378	
1888	8,50,00,6,9	1,0,19,210	55,2,424	6 44	28,83,741	20,11,011		+ 6,10,669	
1889	8,9,71,516	1,11,7,674	61,91,025	7 01	30,19,703	20,43,953		+ 11,28,969	
1890	10,00,69,676	1,14,78,382	60,70,823	6 07	30,96,150	18,14,110		+ 11,60,063	
1891	10,31,46,023	1,20,75,440	65,92,100	6 93	33,97,743	17,5,621		+ 13,82,736	
1892	10,40,47,479	1,15,56,446	62,38,7,7	5 83	38,86,181	16,53,922		+ 6,93,624	
1893	10,68,29,000	1,20,51,147	66,15,198	6 21	39,53,310	16,19,185		+ 10,32,613	
1894	10,73,52,855	1,10,15,726	82,53,539	7 78	41,01,624	18,91,8,0		+ 23,0,035	
1895	10,71,92,132	1,15,09,739	89,74,174	8 37	41,50,415	18,7,565		+ 29,51,494	*Represents payment made to the Brahma putra Sultan pur Branch Railway Company up to 1st April 1904, on account of surpluses plus profits and other adjustments
1896	10,97,80,613	1,50,81,670	90,02,986	8 20	41,06,132	17,56,150		+ 31,40,004	
1897	11,47,6,205	1,47,6,233	90,60,612	7 02	42,80,503	16,53,278		+ 21,26,831	
1898	11,78,54,619	1,47,17,879	83,25,064	7 07	1,9,9,256	15,7,0,20		+ 23,0,688	
1899	12,16,0,777	1,50,12,476	83,0,0,083	6 82	45,00,276	15,2,391		+ 22,38,416	
1900	12,58,5,617	1,71,0,460	92,4,124	7 35	47,02,516	15,6,7,69		+ 29,7,139	
1901	13,19,95,226	1,65,09,440	83,09,281	6 29	41,11,665	23,37,123		+ 18,59,403	
1902	13,89,82,381	1,78,93,098	91,18,840	6 54	43,25,883	23,39,595		+ 23,0,562	
1903	14,91,79,768	1,81,52,420	58,57,091	5 94	47,1,867	23,33,977		+ 18,12,850	
1904	15,89,84,515	1,94,63,098	88,23,372	5 55	50,38,905	23,28,923		+ 14,16,915	
1905	19,29,72,987	2,03,73,194	96,19,904	4 98	56,28,333	23,83,730		+ 16,57,886	

TABLE II

Calendar year	3 (a) EASTERN, SOUTHERN AND CENTRAL SECTIONS				3 (b) NORTHERN, BEHAR AND DACCA SECTIONS				Northern Behar and Kanha Dhubri sections including the Janghat Krishnagar and Teesta Kurnool branches and the British section of the Santabarai exten- sion (3 3/8" and 2' 6" gauge)	Dacca section (3' 3/8" gauge)
	Eastern Southern and Central sections (5' 6" gauge)		Central and South Eastern section (5' 6" gauge)		Northern Bengal (State) (3' 3/8" gauge)		Kannir Dharilla (2' 6" gauge)			
	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings	Larnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings
1862	Rs 91	55 59	Rs 36	128 39	Rs		Rs		Rs	
1863	149	49 43	38	131 07						
1864	176	53 67	53	137 03						
1865	233	48 98	75	114 32						
1866	243	51 05	79	118 9						
1867	279	48 71	64	133 66						
1868	308	46 33	60	173 12						
1869	313	50 29	55	145 24						
1870	335	55 69	55	104 88						
1871	270	56 01	40	90 82						
1872	314	66 60	40	92 07						
1873	37	49 08	70	102 56						
1874	433	52 18	18	78 35						
1875	356	62 16	71	80 48						
1876	401	43 66	68	108 62						
1877	529	41 07	79	81 71	20	140 29				
1878	512	43 71	53	75 08	81	75 31				
1879	491	45 97	92	66 44	101	99 96				
1880	510	41 81	98	71 32	111	60 10				
1881	621	40 91	104	66 43	137	51 23				
1882	611	40 60	130	97 42	160	49 01	25	92 97		
1883	466	50 14	109	51 97	169	49 20	33	81 49		
1884	422	54 05			156	69 93	39	78 26		
1885	380	61 25	Included with Eastern and Southern sections		153	70 16	31	107 29		
1886	403	61 97			180	52 85	29	122 8		
1887	268	52 23							47	141 12
1888	516	47 17							56	111 47
1889	563	44 60								
1890	521	47 12								
1891	562	43 61								
1892	562	41 32								
1893	529	13 74								
1894	624	40 33								
1895	649	33 97								
1896	676	33 74								
1897	678	46 18								
1898	652	41 86								
1899	619	42 30								
1900	689	47 75								
1901	678	50 89								
1902	728	48 18								
1903	707	50 27								
1904	751	53 11								
1905	618	54 61								

APPENDIX 38—*contd.*

History of railways constructed and in progress
[For Index see page 106]

Number ^{Main head 13}
Sub heads (a) to (d) EASTERN BENGAL (STATE) RAILWAY SYSTEM—*contd.*

3 (a) and (b) Eastern Bengal (State) railway (5' 6", 3' 3½" and 2' 6" gauge sections)—*concl.*

Statistics of working—*concl.*

The tables below show the statistics of working of the Central section, the Brahmaputra Sultanpur and Ranaghat Krishnagar branches before they were purchased by the State

Central section (5' 6" gauge)

TABLE I

TABLE II

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Interest	Company's share of net earnings	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
1881	Rs 10,51,983	Rs	Rs		Rs 51,616	Rs	Rs - 1,610	Rs	
1882	46,14,75				1,616		- 1,60,534		
1883	70,36,235	1,07,051	- 30,370		317,139		- 3,16,879	64	1,650
1884	90,51,719	4,54,837	- 1,19,632		362,169		- 4,61,471	76	126,31
1885	90,01,061	5,35,553	8,73	0.09	360,162		- 1,51,929	82	98,46
1886	89,6 705	5,67,313	- 4,73,8		37,210		- 4,17,738	87	102,70
1887	91,09,12	6,18,494	- 7,928		4,0840		- 4,68,763	100	101,21
1888	92,53,170	7,12,901	1,8,145	1.71	519,912		- 1,61,707	110	77,63
1889	91,46,671	7,97,101	2,95,983	3.13	518,691		- 2,22,745	113	59,85
1890	96,58,212	6,17,804	2,1,707	2.54	4,9,2	58,902	- 3,51,017	103	63,15
1891	97,44,315	8,11,66	2,7,735	3.90	47,492	71,129	- 2,19,175	125	79,62
1892	1,00,65,784	7,69,847	3,12,93	3.11	5,30,51	71,600	- 2,91,918	118	59,33
1893	1,00,68,993	7,83,529	3,14,972	3.12	7,07,007	79,617	- 3,01,662	121	59,63
1894	1,0 41,004	8,20,79	3,11,162	2.7	(11,115)		- 3,70,233	126	64,13
1895	1,01,77,466	9,47,391	3,96,09	3.92	6,08,914	6,023	- 2,9,15	146	87,90
1896	1,06,39,927	9,93,256	3,44,165	3.20	7,1,175	91,706	- 3,16,016	144	62,65
1897	1,17,30,810	11,38,99	5,16,912	4.10	7,26,800	77,271	- 1,17,118	175	56,98
1898	1,23,58,700	10,21,67	5,78,008	2.98	7,10,231	1,0,612	- 2,71,860	169	64,08
1899	1,26,78,029	11,39,78	4,11,613	3.18	7,07,017	6,781	- 1,62,003	178	61,23
1900	1,26,06,415	13,33,419	5,50,600	4.31	5,04,855	1,24,611	- 7,8,897	183	53,70
1901	1,29,54,075	14,0,218	6,12,40	4.06	7,05,291	1,16,144	- 11,40,	101	54,25
1902	1,31,11,415	13,1,114	7,73,118	1.8	7,11,298	1,53,447	- 91,047	162	56,43
1903	1,31,88,945	1,03,56	5,07,42	3.85	7,1,01	1,1,610	- 1,29,46	103	66,76
1904	1,31,0,0,612	15,9,68	5,39,173	4.10	5,1,679	1,7,67	- 1,00,67	216	65,10
1905 (up to June)	1,31,77,027	6,66,63	1,5,575	1.0	1,175	38,525	+ 1,15,75	161	76,20

Brahmaputra Sultanpur (3' 3½" gauge) branch.

TABLE I

TABLE II

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Interest	Company's share of net earnings	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings	REMARKS
	Rs	Rs	Rs		Rs	Rs	Rs	Rs		
1897	2,02,610									
1898	12,54,7									
1899	10,58,137	36,300								
1900	24,20,811	1,36,537								
1901	28,27,610	1,96,848	61,975	2.17	42,414	+18,961	61	45,00		
1902	29,17,93	2,10,124	1,72,233	4.53	86,750	0,480	+3,003	78	45,00	
1903	29,42,486	2,54,379	1,49,906	4.75	83,185	22,742	+25,931	82	45,00	
		Amalgamated with the Eastern Bengal (State) railway								

Ranaghat-Krishnagar (2' 6" gauge) branch

TABLE I

TABLE II

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Subsidy from District Board	Total income	Per cent. of total income on capital outlay	Farnings per mile per week	Proportion of expenses to earnings
	Rs	Rs	Rs		Rs	Rs		Rs	
1898	7,22,839								
1899	7,27,809	46,313	8,415	1.16	12,353	20,767	2.85	59	81.81
1900	7,51,809	69,302	19,412	2.59	9,472	28,014	3.85	66	71.95
1901	7,51,157	69,117	15,185	2.02	1,465	16,650	2.22	66	78.03
1902	7,51,158	76,160	21,353	2.84	15,970	37,813	4.97	72	71.97
1903	7,43,657	86,434	33,832	4.55	5,674	39,506	5.31	52	60.86
1904	{ 1st half 2nd half	40,861	12,160	2.876	2,876	15,036			
		Amalgamated with the Eastern Bengal (State) railway							

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 3
Sub-heads (a) to (d) EASTERN BENGAL (STATE) RAILWAY SYSTEM—*contd*

3 (c) Mymensingh-Jamalpur-Jagannathganj Branch railway (3' 3½' gauge)—

This line, which terminates on the Brahmaputra river, is connected with the Eastern section of the Eastern Bengal (State) Railway at Goalundo by the India General Steam and River Steam Navigation Companies' steamer services

Details of construction—

This railway is 50 69 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way—The permanent-way consists of flat-footed steel rails, 50 lbs to the yard, laid on sal sleepers.

Ballast—The line is ballasted throughout with brick.

Fencing—The line is fenced only at stations and through the town of Mymensingh.

Curves—The sharpest curve is of 2,864 feet radius.

Gradients—The ruling gradient is 1 in 300.

Terms of contracts—

The Mymensingh-Jamalpur-Jagannathganj Branch railway is worked under the following contracts—

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj Branch railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj Branch railway office from Calcutta to London.

The general conditions of the contracts are as follows—

Government aid—Government in respect of each year allow to the Mymensingh-Jamalpur-Jagannathganj Branch Railway Company, by way of rebate on the share attributable to the Eastern Bengal (State) railway of the receipts from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic except railway stores interchanged between the Eastern Bengal (State) railway system and this railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 3½ per cent per annum on the actual capital expenditure. Land has been provided free of charge.

Currency of contracts—Government may determine the contracts on 12 months' notice either on the 31st December 1919, or at the end of any subsequent period of 10 years or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings, not including rebate payments, during the three years prior to determination, but not exceeding by more than 20 per cent, or not being less than, the total capital expenditure, and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

Power of Company to surrender contracts—Nil.

Terms of working—After deduction of 45 per cent of the gross earnings for working expenses (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year) in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

Rates and fares—To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal (State) railway.

Statistics of working—

Calendar year	TABLE I						TABLE II		
	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Rebate from E B S Ry	Total income	Percentage on capital outlay	Earnings per mile per week.	Pro of exp to earnings
1896	1,950								
1897	5,54,688								
1898	10,44,638	7,660	4,213	0 40	—	4,213	0 40	27	45 00
1899	16,11,248	66,499	36,575	2 27		36,575	2 72	35	45 00
1900	18,78,395	1,62,028	89,116	4 74		89,116	4 74	58	45 00
1901	20,84,346	1,67,756	92,265	4 43		92,265	4 43	60	45 00
1902	22,85,67	2,05,251	1,12,888	4 91		1,12,888	4 91	74	45 00
1903	22,01,173	2,22,825	1,24,993	5 68		1,24,993	5 68	82	43 90
1904	2,51,113	2,21,168	1,21,312	5 29		1,21,312	5 29	81	43 79
1905	23,86,029	2,16,642	1,18,748	4 98		1,18,748	5 25	81	45 19

3 (d) Cooch Behar railway (2' 6" gauge)—

Details of construction—

This railway is 33 60 miles long, consisting of main line, 22 15 miles, and branch, 11 45 miles known as the Native State section of the Cooch Behar-Santraguri extension. Its construction was sanctioned in 1891 and it was opened throughout in 1900.

Permanent way—The line is laid for 19 55 miles with 25-lb and for 1 83 miles with 41½-lb steel rails on sal and pyinkado sleepers, and for 12 22 miles with 40-lb iron rails on sal sleepers. All rails are flat-footed.

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 3
Sub heads (a) to (d) EASTERN BENGAL (STATE) RAILWAY SYSTEM—*concl*3 (d) Cooch Behar railway (2' 6" gauge)—*concl*Details of construction—*concl**Ballast*—The line is laid without ballast*Fencing*—The line is unfenced*Curves*—The sharpest curve is of 2,000 feet radius*Gradients*—The ruling gradient is 1 in 100

Terms of contract—

The Cooch Behar railway is worked under the following agreement—

Agreement—of 15th June 1903 and having effect from the 1st January 1901 (between the Secretary of State and His Highness the Maharaja of Cooch Behar) for working

The general conditions of the agreement are as follows—

Government aid—The line is the property of the Cooch Behar State*Currency of agreement*—The Eastern Bengal (State) railway to maintain and work the Cooch Behar State railway for a period of five years from 1st January 1901*Terms of working*—The Eastern Bengal (State) railway to receive 40 per cent of the gross earnings for maintenance and working, provided that when the stock of the Eastern Bengal (State) railway is used for the conveyance of any traffic on the Cooch Behar railway, the Eastern Bengal (State) railway will receive and retain up to, but not exceeding, 45 per cent of the gross earnings obtained from the use of such stock. The percentage of working charges will cover the cost of 'New Minor Works' up to the limit of Rs 30 per mile per annum*Rates and fares*—The Eastern Bengal (State) railway administration have full control over rates and fares

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	TABLE II	
					Rs	Per cent of exp to earnings
1891	14,685					
1892	4,09,136					
1893	6,65,172	5,816	-2,455		13	168 94
1894	7,11,318	40,280	8,976	1 20	35	78 71
1895	7,30,953	53,174	10,200	2 63	46	63 89
1896	7,66,731	70,128	38,570	5 03	61	45 00
1897	9,01,219	64,62	35,344	3 92	51	45 00
1898	10,32,938	66,121	6,687	0 65	57	45 00
1899	12,90,031	82,773	43,043	3 32	53	47 95
1900	12,83,906	94,792	51,602	4 02	50	43 41
1901	13,94,923	1,27,596	74,667	5 35	72	41 48
1902	13,95,776	1,24,711	71,153	5 33	71	40 31
1903	14,91,329	1,42,310	83,934	5 62	82	41 10
1904	14,71,311	1,47,575	86,936	5 91	81	41 05
1905	14,82,693	1,43,483	87,313	5 83	85	41 20

Number Main head 4
Sub heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—

Lines comprising the system—The East Indian railway system is made up of—

	Open line	Under construction or sanctioned for construction	Total			
				Miles	Miles	Miles
(a) East Indian railway (5' 6" gauge)						
(b) Delhi Umballa Kali railway (5' 6" gauge)	1,972 30	310 90	2,313 20			
(c) South Behar railway (5' 6" gauge)	162 36		162 36			
(d) Tarkessur railway (5' 6" gauge)	78 76		78 76			
	22 23		22 23			
Total	2,235 63	310 90	2,576 53			

Running powers—

Home line over Foreign lines—

Agra East Bank to Agra Fort, Rajputana Malwa railway
Nathani to Barao Bridge Junction and Chitpor, Eastern Bengal (State) railway } for goods trains only
Moghul Sarai to Benares Cantonment, Oudh and Rohilkhand (State) railway, for passenger trains only

Miles

{ 1 00

{ 31 50

10 00

Total

45 50

Miles

{ 0 0

{ 0 0

1 00

{ 12 75

0 97

{ 0 52

0 63

{ 0 38

13 00

Total

30 05

Miles

{ 0 0

{ 0 0

1 00

{ 12 75

0 97

{ 0 52

0 63

{ 0 38

13 00

Total

30 05

Miles

{ 0 0

{ 0 0

1 00

{ 12 75

0 97

{ 0 52

0 63

{ 0 38

13 00

Total

30 05

Miles

{ 0 0

{ 0 0

1 00

{ 12 75

0 97

{ 0 52

0 63

{ 0 38

13 00

Total

30 05

APPENDIX 38—*contd*

History of railways constructed and in progress
 [For Index see page 106]

Number Main head 4 Sub heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—*contd*

4 (a) East Indian railway proper (5' 6" gauge)—

Details of construction—

The open mileage of the East Indian railway proper is 1,972 30 miles. This may be divided into (1) main line (Howrah to Delhi), 955 08 miles, (2) Loop line (Khana junction to Kiul), 250 39 miles, and (3) branches, 766 53 miles. Of the above 499 10 miles are double and 2 20 miles triple line.

There are in addition 340 90 miles single and 13 60 miles double line under construction. The first sanction to constructing the main line was given in 1851 and it was opened throughout in 1871. The Loop line was opened in 1862.

Permanent way—The main line from Howrah to Delhi, also the Loop line from Khana junction to Kiul, the Jubbulpore branch, Jharia branch, Ondal loop, Ikrab branch, Giridih branch, Patna-Gya branch, Moghal Sarai Gya chord, Barun-Daltonganj branch, Agra branch and Shikohabad-Farukhabad branch are laid with steel rails throughout. A few short branches are still laid with iron rails but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations.

On both up and down roads of the main line from Howrah to Kiul, a distance of 261 miles, the rails are bull-headed, weighing 85 lbs per yard. The 85 lb bull-headed rail has also been laid on the single line between Moghal Sarai and Mirzapur. The rest of the main line and branches, with the exception of the Patna-Gya and Barun-Daltonganj branches, are laid with double headed rails, weighing 75 lbs per yard.

As at present laid, about fifty per cent of the sleepers are wood and the remainder are iron. The wooden sleepers principally consist of sal and deodar, but, owing to the difficulty in getting sal and deodar sleepers and to the rise in price of same, Australian hard woods are now being used. The chairs are cast iron and vary in weight from 36 to 51 $\frac{1}{2}$ lbs. The iron sleepers are of the Denham Olpherts' pattern and weigh about 252 lbs each.

Ballast—The line is ballasted throughout with stone.

Fencing—The line is fenced throughout except the Jharia, Dimuda, Ikrab, Salanpur, Chanch, Pandu, Azimganj, Barun-Daltonganj, Moghal Sarai-Gya and Shikohabad-Farukhabad branches and the Ondal loop and Dhanbad-Jharia Chord.

Curves—The sharpest curve is of 1,525 feet radius.

Gradients—The ruling gradient of the main line is 1 in 300 except between Raneegunge and Luckeeserai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha. The ruling gradient of the Loop line and the Jubbulpore branch is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts—

Contracts of—22nd December 1879—East Indian Railway Company's principal contract

10th November 1893—Contract for the incorporation of the following State branches in the undertaking—Ghazipur (Dildarnagar to Tarighat), Bhadeswar (Bhadreswar junction to the right bank of the Hooghly), Mokameh (Mokameh junction to the Ganges), Digha Ghat (Bankipore junction to the right bank of the Ganges at Digha Ghat), Jharia (Barakar to the Jharia coal-fields), Toposi colliery (Toposi to Kharabid, Nundi to Panuria and Salanpur to Shimdi), Gya (Bankipore to Gya), and Azimganj (Nalhati to Azimganj).

26th February 1896—As to debenture capital

22nd November 1897—Contract for the construction and working of the Moghal Sarai-Gya railway

14th November 1899—Contract modifying that of 1879

The general conditions of the contracts are as follows—

Government aid—Government guarantee interest at 4 per cent in sterling on £6,550,000 (being capital representing the deferred portion, i.e., one fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

Terms of contracts—The lines were purchased from the East Indian Guaranteed Railway Company by the State on the 1st January 1880, and all the contracts then subsisting between the Secretary of State and that Company (except those

relating to debentures or debenture stock) were determined. The purchase price was £32,750,000,* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital sum of £6,550,000), constitute the present East Indian Railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

Currency of contracts—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

Notes—Government relinquished their right to determine the contract at the end of the 20th year and by mutual agreement the principal contract will not be determined before the 31st December 1910.

Power of Company to surrender contract—See currency of contracts.

Terms of working—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 25,000 in each half-year and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the

APPENDIX 38—*contd.**History of railways constructed and in progress*
[For Index see page 106]

Number Main head &
Sub heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—*contd.*

4 (a) East Indian railway proper (5' 6" gauge)—*contd.*Terms of contracts—*contd.*

surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to the Provident Fund) up to a sum of 25 lakhs of rupees are divided in proportion of four-fifths to Government and one-fifth to the Company. Any excess over 25 lakhs of rupees is divided in proportion of fourteen-fifteenths to Government and one fifteenth to the Company.

Rates and fares—Certain maximum and minimum rates and fares have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Annuity	Company's share of net earnings	Gain or loss to the State	REMARKS
1879	Rs 34,32,77,860	4,35,46,730	2,86,14,470	8.34	Rs 1,65,74,363	Rs 61,25,877	Rs 59,14,230	+ 50,14,230	
1880	34,35,77,377	4,39,04,947	2,86,72,035	8.35	*1,68,06,263	17,72,690	+ 70,03,092	+ 70,03,092	
1881	34,87,63,677	4,54,11,472	3,08,35,036	8.81	31,05,426	1,73,92,000	20,63,867	+ 82,73,713	
1882	35,07,21,155	4,71,17,594	2,96,57,056	8.46	32,81,761	1,73,02,000	17,88,073	+ 71,95,210	
1883	35,24,91,304	4,94,67,085	3,11,50,980	8.84	33,16,170	1,72,57,772	19,99,731	+ 80,77,307	
1884	35,57,38,760	4,38,38,714	2,73,22,003	7.68	35,58,033	1,78,50,459	11,72,323	+ 47,41,188	
1885	35,85,96,619	4,03,86,859	3,30,16,960	9.21	38,13,262	1,79,75,714	16,29,502	+ 95,98,482	
1886	36,06,85,918	4,66,70,833	3,05,13,359	8.46	39,91,104	1,89,50,137	14,97,276	+ 60,78,842	
1887	36,12,14,631	4,60,65,661	3,13,31,263	8.67	40,70,941	1,92,13,933	15,87,702	+ 61,62,734	
1888	36,09,27,580	4,51,36,902	3,03,35,075	8.40	40,73,297	2,03,13,530	11,61,693	+ 47,3,555	
1889	36,19,22,300	4,49,57,901	2,94,05,230	8.12	41,81,108	2,09,60,000	8,31,347	+ 31,23,775	
1890	36,21,22,758	4,10,57,665	2,98,26,815	8.24	41,83,278	2,03,43,530	10,37,019	+ 42,62,988	
1891	36,15,18,827	4,56,87,001	3,60,37,028	9.97	43,93,426	1,86,91,054	26,45,392	+ 1,03,01,156	
1892	36,24,97,506	4,91,41,600	3,48,16,719	9.60	37,25,754	2,06,47,164	20,88,760	+ 83,51,041	
1893	36,31,20,357	5,08,44,634	3,60,94,293	9.78	41,2b,889	2,34,16,780	17,04,125	+ 68,16,490	
1894	37,21,36,356	5,26,89,485	3,64,26,405	9.78	43,87,968	2,48,80,592	15,90,767	+ 61,50,068	
1895	37,82,18,020	5,41,50,836	3,78,31,726	10.00	45,73,681	2,61,01,122	14,29,078	+ 57,30,845	
1896	38,27,66,003	5,10,69,142	3,67,77,632	9.61	46,90,562	2,58,59,455	12,4,733	+ 49,81,932	
1897	39,39,91,173	5,89,28,013	4,14,93,469	10.53	48,20,238	2,47,34,406	23,87,763	+ 95,51,062	
1898	40,71,91,336	5,97,96,060	4,08,07,260	10.02	50,16,514	2,32,61,533	24,00,144	+ 99,96,978	
1899	42,70,40,208	6,35,45,974	4,26,60,018	9.99	51,64,902	2,21,45,516	30,09,920	+ 1,20,30,680	
1900	44,28,43,540	6,84,74,972	4,17,15,571	10.10	60,18,054	2,15,00,963	18,09,104	+ 1,53,27,100	
1901	45,66,59,069	7,03,96,636	4,57,18,311	10.01	65,16,878	2,16,82,360	18,51,450	+ 1,56,32,623	
1902	47,06,40,852	6,77,38,713	4,29,80,833	9.13	70,31,492	2,16,46,808	16,19,965	+ 1,26,79,508	
1903	48,79,61,454	6,99,72,639	4,63,98,122	9.52	74,16,371	2,16,15,000	16,82,231	+ 1,56,5,820	
1904	50,26,09,029	7,59,71,544	5,05,61,492	10.06	80,23,978	2,16,15,000	20,64,276	+ 1,88,61,168	
1905	52,58,72,727	7,50,47,139	4,81,85,184	9.16	86,75,860	2,16,15,000	18,62,075	+ 1,60,81,199	

TABLE II

Calendar year	Last Indian (5' 6" gauge)		Nalhati (4' 0" gauge)		Calendar year	Last Indian (5' 6" gauge)		Patna Gya (5' 6" gauge)		Nalhati (4' 0" gauge)		Dildarnagar-Ghazipur (5' 6" gauge)	
	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings		Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings
1853	Rs	Rs			1878	Rs 507	35 c9	Rs	Rs 64	79 41		Rs	
1854	131	62 18			1879	552	32 86	121	55 84	65	67 56		
1855	108	51 97			1880	549	33 04	162	56 13	49	105 33	56	128 33
1856	167	40 62			1881	578	31 85	178	65 11	47	70 20	63	99 52
1857	232	38 12			1882	601	36 94	184	60 51	51	73 05	73	85 24
1858	279	46 49			1883	630	36 95	159	51 93	57	69 63	80	49 87
1859	253	44 77			1884	558	37 61	174	57 48	55	90 84	75	58 97
1860	231	49 36			1885	589	35 25	174	52 52	54	82 08	75	52 28
1861	240	46 49			1886	591	34 59	180	52 01	59	65 29	76	52 05
1862	192	53 81			1887	583	31 70	178	46 58	65	70 57	77	46 45
1863	222	55 01			1888	567	33 24	168	47 97	74	78 39	74	91 13
1864	253	50 79	36	43 88	1889	557	34 59	175	48 70	73	78 18		
1865	311	44 82	41	63 28	1890	538	31 35	174	45 80	71	78 01		
1866	374	44 24	36	10 15	1891	615	27 21	204	42 76	66	62 97		
1867	369	48 91	45	68 81	1892	587	28 47	193	42 04	Convered to 5' 6" gauge			
1868	346	44 88	57	83 60	1893	584	27 44						
1869	399	44 42	60	59 64	1894	604	30 87						
1870	424	43 68	60	48 77	1895	603	31 07						
1871	338	43 36	55	58 07	1896	597	31 98						
1872	368	41 44	53	57 14	1897	649	29 47						
1873	382	38 75	60	60 06	1898	658	31 76						
1874	474	35 70	61	67 22	1899	697	32 84						
1875	374	39 58	47	76 42	1900	708	34 78						
1876	452	35 08	54	111 15	1901	733	35 06						
1877	565	31 85	64	100 47	1902	687	36 55						
					1903	692	33 64						
					1904	749	33 39						
					1905	738	35 74						

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 4
Sub heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—*contd*

4 (b) Delhi Umballa-Kalka railway (5' 6" gauge)—

Details of construction—

This railway is 162 36 miles long. It was opened throughout in 1891.

Permanent-way—The permanent way consists of double headed steel rails, 75 lbs to the yard, laid on Denham Olpherts' cast-iron plate and wooden sleepers with cast iron chocks.

Ballast—The line is ballasted throughout with stone.

Fencing—The line is fenced throughout.

Curves—The sharpest curve is of 1,010 feet radius.

Gradients—The ruling gradient is 1 in 200 except for 15 miles from Kalka where it is 1 in 40.

Terms of contracts—

The railway is worked under the following contracts—

Contracts of—24th January 1889 (between the Secretary of State and the East Indian Railway Company) for working. 12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January 1893 the 2 per cent of gross earnings previously retained by Government.

24th July 1896 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for the provision of funds for capital works.

9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of 3½ per cent on share capital.

The general conditions of the contracts are as follows—

Government aid—By the contract of 9th June 1897, Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of 3½ per cent per annum on their share capital. Land was also provided free of cost.

Currency of contracts—The contracts may be determined by effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangement be made, Government may determine the contracts on the 31st December 1926 or on the 31st December of any subsequent tenth year. On determination, Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

Power of Company to surrender contracts—Nil.

Terms of working—Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling stock and to work and maintain the line until the 31st December 1916, taking 48 per cent of the gross receipts of the railway for the working agency (which may include any single item of capital expenditure, not exceeding Rs 1,000 classed as a 'Minor Work,' and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying over 52 per cent to the Company. Surplus profits in excess of 3½ per cent per annum are divided equally between Government and the Company until Government have been repaid advances of subsidy, with interest. Thereafter, all surplus profits belong to the Company.

Rates and fares.—To be agreed upon from time to time between the Secretary of State and the working agency, but in the case of that portion of the line between Delhi and Umballa to be not more than the maximum, nor less than the minimum rates and fares in force on the East Indian railway, and in the case of that portion between Umballa and Kalka to be not more than three times such maximum nor less than such minimum.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Subsidy from Government	Total income	Percentage of total income on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1889	Rs 58,90,633	Rs 9,07,697	Rs 4,72,002	3 04	Rs 4,72,002	Rs 3 04	128	48 00	
1890	1,35,55,580							129	48 00
1891	1,55,44,692	10,81,769	5,62,520	3 56	5,62,520	3 56	143	48 00	
1892	1,58,22,187	11,98,508	6,23,224	4 01	6,23,224	4 01	143	48 00	
1893	1,55,24,600	13,37,526	6,95,514	4 48	6,95,514	4 48	159	48 00	
1894	1,55,25,547	14,60,519	7,59,470	4 90	7,59,470	4 90	174	48 00	
1895	1,55,06,120								
1896	1,51,49,783	13,18,810	6,85,797	4 44	6,85,797	4 44	158	48 00	
1897	1,53,26,585	15,73,319	8,18,126	5 34	8,18,126	5 34	186	48 00	
1898	1,53,43,587	16,07,512	8,35,906	5 45	8,35,906	5 45	191	48 00	
1899	1,53,01,272	14,49,378	7,29,541	4 77	7,29,541	4 77	172	48 00	
1900	1,53,15,467	13,72,523	7,13,712	4 66	7,13,712	4 66	163	48 00	
1901	1,52,92,648	18,05,858	9,39,046	6 14	9,39,046	6 14	213	48 00	
1902	1,54,23,791	18,66,695	9,70,681	6 29	9,70,681	6 28	221	48 00	
1903	1,55,49,998	18,30,960	9,52,099	6 12	9,52,099	6 12	216	48 00	
1904	1,55,51,763	18,53,475	9,63,807	6 19	9,63,807	6 19	218	48 00	
1905	1,56,07,499	20,16,936	10,48,807	6 72	10,48,807	6 70	238	48 00	

APPENDIX 38—*contd*

History of railways constructed and in progress

[For Index see page 106]

Number Main head 4 Sub-heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—*contd*

4 (c) South Behar railway (5' 6" gauge)—

Details of construction—

This railway is 78 76 miles long. It connects Luckeserai with Gaja and was opened in 1899.

Permanent-way—The permanent way consists of double-headed steel rails, 75 lbs to the yard, laid on wooden sleepers and cast-iron chairs, and Denham Olpherts' cast-iron plate sleepers.

Ballast—The line is ballasted throughout with stone.

Fencing—The line is fenced near villages, at stations and for a short distance on each side of level crossings only.

Curves—The sharpest curve is of 3,000 feet radius.

Gradients—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts—

Contracts of—7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction

22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

The general conditions of the contracts are as follows—

Government aid—Government, in respect of each half-year, allow to the South Behar Railway Company, by way of rebate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent of such share as will, together with the net earnings of the South Behar Railway Company, make up an amount equal to interest for the half-year at the rate of 4 per cent per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs 120 lakhs, and the amount towards making up of which the rebate is to be allowed is to be limited to Rs 2,40,000 in any half-year. Land was also provided free of cost.

Currency of contracts—Government have power to determine the contracts on the 30th June 1919, or at the end of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England an amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authority of the Secretary of State.

Power of Company to surrender contracts—Nil

Terms of working—For the first two years after the opening of any section, the cost of maintenance was charged against capital, Government retaining only 35 per cent of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent going to the Company. Thereafter, Government retain 45 per cent of the gross earnings (which may include any single item of capital expenditure, not exceeding Rs 1,000 classed as a 'Minor Work' and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.

Rates and fares—To be agreed upon from time to time between the Government and the working agency within the maxima and minima rates and fares in force on the East Indian railway.

Statistics of working—

TABLE I

TABLE II

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Rebate from E I R	Total income	Percentage of total income on capital outlay	Earnings permissible per week	Proportion of expenses to earnings
1895	5,17,988								..
1896	30,83,036								..
1897	62,72,345								
1898	97,45,791								
1899	1,18,16,730	2,03,328	1,32,163	1 12	33,403	1,65,566	1 40	101	35 00
1900	1,23,15,110	4,67,133	3,03,636	2 47	1,44,404	4,48,040	3 64	114	35 00
1901	1,23,46,533	5,14,870	3,08,822	2 50	1,28,082	4,36,904	3 53	125	40 02
1902	1,19,68,612	4,99,894	2,74,895	2 29	1,35,445	4,10,340	3 42	122	45 00
1903	1,20,01,897	5 24,005	2,88,533	2 40	1,57,768	4,46,241	3 72	128	45 00
1904	1,19,72,914	5 70,358	3 13,697	2 62	1,62,82	4,79,079	4 00	133	45 00
1905	1,19,77,154	5,55,199	3,05,360	2 55	1,72,721	4,78,081	3 99	135	45 00

4 (d) Tarkessur railway (5' 6" gauge)—

Details of construction—

This railway, which connects Seoriphuli, a station on the East Indian railway, with Tarkessur, is 22 23 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

Permanent-way—The permanent-way consists of 74-lb iron rails laid on Denham Olpherts' cast-iron plate sleepers.

Ballast—The line is ballasted throughout with stone.

Fencing—The line is fenced throughout.

Curves—The sharpest curve is of 2,700 feet radius.

Gradients—The ruling gradient is 1 in 500.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 108]

Number Main head 4
Sub heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—*concl'd*4 (d) Tarkessur railway (5' 6" gauge)—*concl'd*

Terms of contracts—

The railway is worked under the following contracts —

Contracts of—8th September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction

15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working

1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working

The general conditions of the contracts are as follows —

Government aid — Land was provided free of cost

Currency of contracts — The contract of 1883 terminates on the 7th September 1982, but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years, and thereafter at intervals of ten years. In the event of such determination, Government will pay the Company a sum equal to the aggregate net profits during the twenty years preceding

Power of Company to surrender contracts — Nil

Terms of working — From the gross earnings are deducted working expenses (which may include capital expenditure classed as 'Minor Works' subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) calculated at the same percentage of the gross earnings as obtains on the East Indian railway system as a whole, 5 per cent of the gross earnings for the hire of rolling-stock, and contribution to the Provident Fund. The balance is divided in proportion of four-fifths to the Tarkessur Railway Company and one fifth to the East Indian Railway Company.

Rates and fares — Certain maxima have been fixed, and the Company is authorized to charge within those maxima such rates and fares as may from time to time be mutually agreed upon

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1885	Rs 16,8995	Rs 2,62,313	Rs 1,24,424	7.37	Rs 227	52.57
1886	17,24,717	2,49,003	1,19,136	6.91	215	52.15
1887	17,28,410	2,68,792	1,32,274	7.65	228	49.86
1888	17,34,822	2,79,717	1,30,780	7.88	243	51.10
1889	17,28,183	2,84,895	1,36,578	7.90	246	55.51
1890	17,23,778	2,86,526	1,41,283	8.35	213	49.64
1891	17,29,021	3,05,132	1,63,478	9.45	264	46.42
1892	17,32,567	2,93,674	1,54,837	8.94	254	47.28
1893	17,47,280	2,63,051	1,50,420	8.61	245	46.86
1894	17,47,840	3,00,159	1,56,469	8.95	265	48.96
1895	17,53,310	3,08,156	1,59,091	9.07	267	48.37
1896	17,56,898	3,13,243	1,57,005	8.95	271	49.88
1897	17,57,160	3,12,656	1,62,563	9.25	270	49.01
1898	17,77,085	3,14,056	1,58,461	8.92	272	49.54
1899	17,84,166	3,03,759	1,52,491	8.55	267	50.58
1900	17,84,166	3,32,965	1,61,132	9.03	288	51.61
1901	17,92,293	3,30,390	1,57,828	8.81	285	52.23
1902	17,91,612	3,28,510	1,59,348	8.56	283	53.83
1903	17,93,985	3,33,924	1,69,741	9.13	288	50.96
1904	17,97,555	3,30,635	1,63,006	9.07	284	50.76
1905	17,98,615	3,26,715	1,55,221	8.63	283	52.49

TABLE II

Number Main head 5
Sub heads (a) to (h) GREAT INDIAN PENINSULA RAILWAY SYSTEM—

Lines comprising the system — The Great Indian Peninsula railway system is made up of—

		Open line Miles	Under construction or sanctioned for construction Miles	Total Miles	
(a) Great Indian Peninsula railway (5' 6" gauge)		1,961.63	45.42	1,607.05	
(b) Agra Delhi Chord railway (5' 6" gauge)		119.75	6.06	125.81	
(c) Bhopal Itarsi railway (5' 6" gauge)		57.39		57.39	
(d) Bhopal Ujjain railway (5' 6" gauge)		113.27		113.27	
(e) Bina Gonda Baran railway (5' 6" gauge)		145.63		145.63	
(f) (g) (h)		807.00	2.24	810.14	
(g) (2' 0" gauge)		183.53	66.66	250.19	
(h) (2' 0" gauge)			12.79	12.79	
		Total 2,691.10	193.17	3,122.27	

Running powers—

Home line over foreign lines —

Dadar junction to Colaba, Bombay, Baroda and Central India railway, for goods trains only	7.25
At Dadar junction to passenger and goods trains	2.89
At Dadar junction to passenger trains and 0.52 mile for goods trains	1.49
At Dadar junction to passenger and goods trains	0.63
At Dadar junction to passenger trains only	0.28
At Katni, Bengal Nagpur railway, for passenger trains only	1.00
At Ujjain, Bombay Baroda and Central India railway, for passenger and goods trains	0.21
At Cawnpore, Oudh and Rohilkhand (State) railway for passenger trains only	0.66
From Cawnpore to Lucknow, Oudh and Rohilkhand (State) railway, for passenger and goods trains	44.63
	Total 59.97

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 5 Sub heads (a) to (h) GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd*Running powers—*contd*

Foreign lines over home line —

Bombay Baroda and Central India railway, Dadar Junction to Carnac bridge, for goods trains only	Miles 4.39
Bengal Nagpur railway at Nagpur for Passenger and goods trains	0.65

Total	5.04
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5 (a) Great Indian Peninsula railway proper (5' 6" gauge) —

This line was purchased by the State in 1900, but the working was left in the hands of the Company under the term of a new Contract, dated the 21st December 1900

Details of construction—

The open mileage of the Great Indian Peninsula railway proper is 1,561.63 miles. This may be divided into (1) North-East line, main line (Bombay to Jubbulpore), 615.10 miles, branches, 384.99 miles (2) South-East line, main line (Kalyan to Raichur), 408.86 miles, branches, 152.68 miles. Of the above 567.48 miles are double and 4.92 mile quadruple line

There are under construction 45.42 miles of single line

First sanction to the construction of the North-East line was given in 1850 and it was opened throughout in 1870. The South-East line was sanctioned in 1851 and it was opened throughout in 1871

Permanent-way—The main line is laid with 86-lb double-headed, 82-lb bull-headed and 69-lb double-headed steel rails. The sleepers originally laid were chiefly wooden, these have now to a large extent been replaced by iron pots. The whole of the South-East line, except the ghat sections, is laid with iron pots

Ballast—The line is fully ballasted throughout with sand gravel or broken stone

Fencing—With the exception of the Mohpani, Chalisgaon-Dhulia, and Jalgaon-Amalner branches the line is fully fenced.

Curves—The sharpest curve has a radius of 990 feet

Gradients—The ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 10 banking sections near Vasind and Asvali, the ruling gradient on the ghat sections is 1 in 37

Terms of contract—

The railway is worked under the following contract —

Contract of—21st December 1900 for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking

The general conditions of the contract are as follows —

Government aid—Government to pay interest at 3 per cent per annum on the amount for the time being paid up or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company, which is at present authorised at £2,575,000. All capital will be provided by the Secretary of State bearing interest at the rate of 3½ per cent per annum, or at such other rate as may be agreed upon, or will be raised by the Company, by the issue of debentures or debenture stock at such rate of interest as the Secretary of State may determine. Land was provided free, but any land acquired after 30th June 1900 is paid for from the capital of the undertaking

Terms of contract—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by the State in 1900, and all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £40 7s 1,568, payable, up to the 17th August 1948, in the form of a terminable annuity of £1,268,516

* Company's stock at date of purchase	£
Debentures and debenture stock	34,859,218
	5,922,350
Total	<u>40,781,568</u>

Currency of contract—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company from all debts and liabilities incurred under sanction

Power of Company to surrender contract—Nil

Terms of working—From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted—

(i) The working expenses, which may include any single item of capital expenditure not exceeding Rs 2,000 to be passed as a 'Minor Work', subject to a maximum charge on such account of Rs 25,000 in each half-year and a payment of Rs 40 per mēn mile worked to be made half-yearly to Government for supervision,

(ii) A sum of Rs 1,00,00,000 which is payable to Government;

(iii) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period $\frac{1}{10}$ ths of the surplus are paid to the Secretary of State and $\frac{4}{10}$ th to the Company, provided that if the Company increases its new capital and issues further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of $\frac{1}{10}$ th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth share

Rates and fares—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 5
Sub heads (a) to (h) GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd*

5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—*contd*

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on Capital outlay	Guaranteed interest	Annuity	Company's share of net earnings	Gain or loss to the State	Calendar year	Earnings per mile per week	Pro of exp to earnings
1879	Rs 25,59,56,152	Rs 2,52,48,315	Rs 1,01,90,602	3.98	Rs 1,24,60,646	Rs	Rs 6,14,201	—28,89,335	1853	Rs 119	45.90
1880	25,58,96,113	2,49,53,253	1,11,05,551	4.34	1,24,93,200		5,53,836	—10,41,480	1854	88	60.81
1881	25,75,86,095	3,20,56,823	1,61,74,097	6.23	1,24,93,200		18,23,748	+18,57,149	1855	89	70.21
1882	25,75,90,499	3,53,63,201	1,80,68,483	7.02	1,24,93,200		32,05,883	+23,69,400	1856	113	42.17
1883	26,07,58,700	3,61,14,365	1,75,36,005	6.72	1,25,12,825		33,22,918	+17,00,262	1857	128	45.27
1884	26,31,97,600	3,36,56,514	1,59,55,250	6.06	1,42,81,503		24,76,048	—8,02,301	1858	149	61.02
1885	26,84,13,316	3,61,32,047	1,79,31,397	6.68	1,51,17,467		26,97,844	+1,16,586	1859	172	67.55
1886	26,92,99,673	3,92,57,907	2,08,78,390	7.75	1,60,91,138		39,89,569	+7,97,683	1860	119	72.07
1887	27,03,76,513	3,99,27,463	2,10,60,237	7.80	1,66,44,568		41,03,068	+8,32,601	1861	139	76.35
1888	27,25,03,364	4,10,50,219	2,16,30,667	7.94	1,72,81,176		43,31,246	+23,24,	1862	149	61.90
1889	27,50,39,981	3,70,68,814	1,78,91,616	6.51	1,74,32,160		26,82,255	—22,22,799	1863	172	63.03
1890	27,77,29,064	3,81,45,242	1,90,22,952	6.85	1,55,93,271		31,01,971	+3,04,710	1864	187	64.25
1891	27,75,19,781	4,52,55,333	2,32,50,703	8.38	1,67,57,262		51,89,008	+18,04,438	1865	234	59.54
1892	27,72,17,255	4,03,65,627	2,01,95,097	7.28	1,88,01,314		38,18,506	—21,22,723	1866	357	58.07
1893	27,72,03,860	3,88,18,742	1,79,90,922	6.49	1,91,65,618		29,25,476	—41,00,172	1867	368	55.69
1894	27,91,09,112	3,62,74,296	1,62,42,786	5.62	2,18,32,651		30,40,331	—66,30,196	1868	387	61.80
1895	27,95,39,235	3,37,90,191	1,47,16,901	5.26	2,16,97,060		16,20,361	—86,00,520	1869	414	64.09
1896	27,90,29,173	3,44,10,629	1,54,05,060	5.52	2,02,18,872		21,53,257	—69,67,069	1870	303	59.17
1897	27,92,85,611	2,84,32,402	93,83,654	3.36	1,89,46,479			—95,62,825	1871	924	47.28
1898	28,18,87,021	3,48,77,496	1,41,02,053	5.00	1,83,20,513		13,57,327	—55,75,787	1872	369	47.60
1899	28,55,40,756	3,58,09,431	1,56,57,520	5.48	1,79,65,944		17,77,032	—40,85,456	1873	426	48.30
1900 { 1st half }	30,27,49,717	3,46,31,925	{ 95 37,120	3.15	80,65,500		14,48,203	—8,77,573	1874	470	48.00
1900 { 2nd half }			{ 66,30,083	2.19	24,34,267			—52,93,073	1875	466	48.67
1901	30,38,67,135	4,16,57,453	2,16,48,151	7.12	48,06,903	1,90,87,970	2,72,210	—26,08,937	1876	501	52.91
1902	30,57,71,091	4,23,12,608	2,10,73,833	6.89	49,41,692	1,90,56,785	2,92,372	—32,17,456	1877	478	51.42
1903	31,08,53,055	4,68,61,584	2,38,12,514	7.66	50,66,786	1,90,28,730	3,23,378	—6,09,880	1878	508	49.80
1904	32,00,72,108	4,82,41,314	2,41,70,728	7.55	53,09,707	1,90,28,730	2,91,513	—4,50,2.3	1879	584	48.25
1905	32,65,20,022	5,22,33,877	2,70,20,162	8.31	57,9,430	1,90,28,730	4,63,709	+17,68,213	1880	592	49.93

TABLE II

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 5
Sub heads (a) to (h) GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—*concl'd*Statistics of working—*concl'd*

Calendar year	WARDHA COAL BRANCH						DHOND-MANMAD BRANCH						TABLE II				
	TABLE I			TABLE II			TABLE I			TABLE II			Garnings per mile per week	Pro of exp to earnings			
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	In terest	Gain or loss to the State	Earnings per mile per week	Pro of exp to earnings	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	In terest	Gain or loss to the State			
1879	Rs 55,99,772	Rs 1,65,158	Rs 6,073	0 11	Rs 2,51,434	-245,361	Rs 69	Rs 81 64	Rs 98,90,308	Rs 4,67,557	-27,661	Rs 4,07,525	Rs 4,35,180	Rs 62	105 92		
1880	57,32,921	3,02,879	-1,31,730	2,57,032	-3,88,762	1,19,447	65	152 90	1,07,29,227	6,95,094	65,145	0 61	4,76,299	-4,11,151	91	87 31	
1881	58,80,993	4,75,988	2,37,916	1,19,447	-1,18,469	197	104 35	99,49,346	6,33,862	1,22,588	1 23	3,93,438	-2,70,850	*	*	*	
1882	60,94,186	5,95,622	98,287	1 61	2,38,834	-1,40,547	255	76 80	99,25,416	7,99,553	1,59,192	1 60	3,97,802	-2,38,610	109	76 65	
1883	63,93,758	7,64,702	5,89,382	9 22	2,47,602	+3,41,757	126	59 80	1,00,64,757	8,22,833	1,92,139	1 91	4,02,585	-2,10,446	116	76 77	
1884	66,20,641	6,81,037	2,11,860	3 20	2,61,176	-49,816	121	64 80	1,04,49,438	8,77,100	2,03,785	1 99	4,08,233	-2,04,406			
1885	66,65,755	6,55,649	1,46,395	1,35,936	2,26,219	-1,17,924	108	80 66	1,02,68,278	9,07,422	2,20,623	2 15	4,10,544	-1,89,921			
1886	71,93,093	7,28,205	1,85,936	1 89	2,78,228	-1,42,292	114	92 23	1,09,26,745	9,84,718	2,33,764	2 14	4,30,353	-1,96,589			
1887	71,00,635	7,68,052	1,31,931	1 86	2,89,465	-1,57,481	125	80 76	1,09,46,935	9,60,390	2,27,338	2 08	4,37,893	-2,10,555			
1888	70,91,230	8,71,430	1,98,020	2 79	2,84,513	-66,503	135	74 21	1,09,75,115	10,31,762	2,55,145	2 33	4,38,458	-1,83,013			
1889	70,54,755	8,62,694	2,09,621	4 25	2,82,844	+16,777	142	57 24	1,09,88,830	10,08,616	2,49,427	2 27	4,39,319	-1,89,892			
1890	70,06,181	9,93,326	2,75,001	3 93	2,81,296	-6,205	140	63 64	1,09,93,448	10,61,316	2,63,134	2 39	4,39,629	-1,76,495			
1891	49,81,196	2,58,971	60,053	2 21	2,03,779	-1,43,726			1,10,44,039	11,90,340	3,08,583	2 79	4,40,296	-1,31,713			
1892	49,87,689	2,82,986	34,096	0 68	1,99,337	-1,65,241			1,10,73,025	12,18,413	3,26,335	2 96	4,42,535	-1,14,200			
1893	49,87,689	2,10,856	89,213	1 79	1,99,484	-1,10,371			1,11,37,125	12,96,793	3,48,572	3 13	4,44,216	-95,574			
1894	49,87,689	2,20,237	69,289	1 79	1,99,508	-1,10,219			1,12,11,642	13,61,866	3,81,993	3 41	4,48,018	-66,025			
1895	49,90,794	1,93,552	76,362	1 53	1,99,539	-1,23,177			1,13,18,247	14,04,021	4,05,233	3 61	4,50,104	-41,871			
1896	49,96,305	2,06,078	83,859	1 68	1,99,745	-1,15,886			1,13,73,050	13,11,585	3,67,395	2 23	4,55,018	-87,623			
1897	49,96,325	1,98,658	58,531	1 17	1,99,794	-1,41,263			1,14,06,534	12,01,143	2,81,272	2 47	4,56,230	-1,74,958			
1898	49,96,325	2,09,600	77,827	1 56	1,99,833	-1,32,026			1,14,23,076	11,18,296	2,89,536	2 53	4,56,411	-1,66,875			
1899	49,96,325	2,07,216	82,500	1 65	1,99,850	-1,17,852			1,15,34,107	11,55,032	2,99,555	2 60	4,59,296	-1,59,741			
1900 { 1st half }	*	1,75,380	{ 80,754 }	{ 1 65 }	1,99,850	-99,927	{ 19,173 }	{ }	*	7,25,613	{ 2,11,534 }	{ 2 30 220 }	{ }	{ 18,686 }	{ }		
1901 { 2nd half }	Amalgamated with the Great Indian Peninsula railway							Amalgamated with the Great Indian Peninsula railway									

Calendar year	KHAMGAON BRANCH						AMRAOTI BRANCH						TABLE II		
	TABLE I			TABLE II			TABLE I			TABLE II			Earnings per mile per week	Pro of exp to earnings	
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Earnings per mile per week	Pro of exp to earnings	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Earnings per mile per week	Pro of exp to earnings			
1879	Rs 5,35,617	Rs 30,066	Rs 266	0 94	Rs 146	100 69	Rs 4,77,043	Rs 69,904	Rs 16,175	0 89	Rs 224	76 86			
1880	5,19,888	27,363	4 922	0 92	*	*	4,45,585	50,866	3,639	0 82	*	92 85			
1881	4,89,271	41,506	4,561	0 92	*	*	4,45,063	53,034	34,424	7 72	*	*			
1882	4,91,164	75,966	30,389	6 10	*	*	4,44,651	85,147	33,535	8 89	*	*			
1883	4,90,996	62,657	22,469	4 58	151	64 14	4,44,860	96,160	41,387	9 88	308	53 84			
1884	4,90,903	46,830	13,037	2 66	113	72 16	4,44,774	76,782	31,174	7 68	246	55 49			
1885	4,90,739	41,363	11,020	2 25			4,44,730	80,803	34,447	7 75					
1886	4,89,613	59,452	20,233	4 13			4,44,686	92,111	44,137	9 93					
1887	4,89,180	53,479	16,990	3 47			4,44,908	88,157	35,855	8 07					
1888	4,88,357	52,635	15,797	3 23			4,43,892	81,710	30,886	6 96					
1889	4,90,911	63,372	22,528	4 59			4,45,615	1,02,023	41,671	9 35					
1890	4,90,520	53,288	26,092	5 32			4,45,155	1,01,502	46,254	10 39					
1891	4,90,408	66,675	32,620	6 65			4,49,395	1,12,909	53,793	11 88					
1892	4,89,132	65,548	30,903	6 32			4,50,160	1,05,763	48,637	10 80					
1893	4,87,507	21,697	21,697	4 51			4,49,998	48,911	43,056	9 57					
1894	4,86,003	21,906	21,667	4 46			4,49,461	42,795	41,910	9 32					
1895	5,20,947	26,031	26,031	5 00			4,49,988	39,187	38,250	8 50					
1896	5,22,603	24,446	24,446	4 68			4,51,119	43,755	42,871	9 50					
1897	5,22,150	13,901	13,901	2 66			4,52,415	30,741	29,862	6 60					
1898	5,22,150	24,326	24,326	4 66			4,53,498	40,057	39,172	8 62					
1899	5,22,150	41,850	14,850	2 84	120	52 74	4,54,417	73,000	32,214	7 09					
1900	5,22,150	33,783	13,924	2 67	120	52 74	4,54,418	78,532	32,436	7 14					
1901	5,22,150	49,878	23,337	4 47	120	52 35	4,51,915	1,08,578	50,537	11 12	365	53 73			
1902 { 1st half }	*	{ 32,468 }	{ 17,209 }	{ }	{ }	{ }	{ }	{ 79,582 }	{ 41,099 }	{ }	{ }	{ 488 }	{ 53 88 }		
1903	Amalgamated with the Great Indian Peninsula railway				Amalgamated with the Great Indian Peninsula railway		Amalgamated with the Great Indian Peninsula railway								

* Included with the Great Indian Peninsula railway.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 5
Sub heads (a) to (k) GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

5 (b) Agra-Delhi Chord railway (5' 6" gauge)—

This railway has been constructed by the State and is worked by the Great Indian Peninsula Railway Company.

Details of construction—

This railway is 119 75 miles long. Its construction was sanctioned in 1898 and it was opened in 1904.

There were, in addition, 6 06 miles under construction.

Permanent-way—The line has been laid with 85-lb bull-headed steel rails on 45-lb cast iron chairs spiked with 3 spikes to deadar sleepers.*Ballast*—The line is ballasted with kunkur soil and stone ballast to bring it up to full section.*Fencing*—Kosi-Delhi section is fenced and Agra Kosi section is being fenced.*Curves*—The sharpest curve is of 950 feet radius.*Gradients*—The ruling gradient of the line is 1 in 400, except between Raja Ki Mundi Junction and Agra Jail and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

Terms of contract—

This railway is being worked under a contract (between the Secretary of State and the Great Indian Peninsula Railway Company) which is under execution and which is to be deemed to have commenced on and from the day on which the Agra-Delhi Chord Railway was opened for public traffic.

The general conditions of the contract are as follows—

Government aid—The line is the property of the State.*Currency of contract*—The contract may be terminated on the 30th June or 31st December during its subsistence either by the Secretary of State or the Company giving to the other party not less than twelve calendar months' notice in writing.*Terms of working*—The charge for working expenses of the Agra-Delhi Chord Railway bears the same proportion to its gross earnings as the entire working expenses of the Great Indian Peninsula Railway "undertaking" including the Agra-Delhi Chord Railway bear to their combined gross earnings. The whole of the net earnings belong to Government.*Rates and fares*—The same as are in force on the Great Indian Peninsula Railway undertaking.

Statistics of working—

TABLE I

TABLE II

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest charges	Gain or loss to the State	Earnings per mile per week	Proportion of ex- penses to earnings
1904	Rs 1,05,91,000	Rs 18,070	Rs 9,992	0 09	Rs 2,95,164	Rs -2,85,172	Rs 43	44 71
1905	Rs 1,22,46,927	Rs 80,655	Rs 4,19,625	3 13	Rs 4,20,181	Rs -556	Rs 140	47 85

5 (c) Bhopal-Itarsi railway (5' 6" gauge)—

Details of construction—

This railway is 57 39 miles long. Its construction was sanctioned in 1880 and it was opened in 1884.

Permanent-way—The line is laid with the Indian Midland railway 80-lb flat footed steel rails on Indian Midland railway cast iron pot sleepers.*Ballast*—The line is fully ballasted throughout with broken stone.*Fencing*—The line is fenced throughout.*Curves*—There are no curves with a radius of less than 990 feet.*Gradients*—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

Terms of contracts—

The Bhopal-Itarsi railway is worked under the following—

Agreement of—16th September 1880 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

2nd December 1890, supplemental to that of 1880 for division of profits.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the contracts are as follows—

Government aid—The British Government have paid for the portion, 13 11 miles, in British territory, and a moiety of the cost of the bridge over the Nerbudda, or in all about 13 lakhs, the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. All additional capital has to be provided by Government.*Currency of contracts*—The provisions in the principal contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend, and are applicable, to the Bhopal-Itarsi railway.*Power of Company to surrender contracts*—Nil.*Terms of working*—The Company receives a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity between the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the event of the railway being worked at a loss, such loss to be borne in the same proportion.

APPENDIX 38—*contd.**History of railways constructed and in progress.*
[For Index see page 106]

Number ^{Main head 5}
_{Sub heads (a) to (h)} GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

5 (c) Bhopal-Itarsi railway (5' 6" gauge)—*concl'd*

Terms of contracts—*concl'd*

Rates and fares—The same rates and fares as are in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year	TABLE I										TABLE II			
	BHOPAL ITARSI (BRITISH SECTION)					BHOPAL ITARSI (NATIVE STATE SECTION)					British section		Native State section	
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	In forest	Gain or loss to the State	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Earnings per mile per week	Proportion of expenses to earnings	Earnings per mile per week	Proportion of expenses to earnings
1880	Rs	Rs	Rs		Rs	Rs	Rs	Rs	Rs		Rs		Rs	
1881						1,21,846								
1882	12,50,000	14,376	2,704	0 08	50,000	-47,296	34,60,091	14,376	2,704	0 08	70	81 90		
1883	12,50,000	25,573	-9,135		50,000	-59,185	38,23,236	25,573	-9,135		43	135 72		
1884.	12,50,000	7,664	-1,406		50,000	-51,406	45,83,261	28,102	-5,152		40	104 13		
1885	12,50,000	27,425	-3,874		50,000	-53,874	47,71,375	1,04,683	-14,789					
1886	12,50,000	27,822	-3,210		50,000	-53,240	48,26,036	1,47,416	-12,501					
1887	12,50,000	49,327	3,850	0 31	50,000	-46,150	48,09,939	1,85,576	14,813	0 31				
1888.	12,50,000	55,117	5,340	0 43	50,000	-44,660	48,01,701	1,86,518	18,072	0 38				
1889	12,50,000	79,163	-5,422		50,000	-55,422	49,40,846	2,67,936	-18,351		117	106 85	117	106 85
1890.	12,85,077	87,765	-16,572		50,351	-66,923	50,00,000	2,97,019	-56,993		130	118 88	130	118 88
1891	15,18,568	1,80,884	48,607	3 21	57,713	-9,106	50,00,000	1,73,154	3 46		200	62 50	199	62 50
1892	17,46,208	1,53,099	56,397	3 23	69,181	-12,734	50,00,000	1,56,863	3 32		226	63 16	195	62 96
1893	20,25,058	1,69,162	52,088	2 57	78,429	-26,391	50,00,000	4,24,236	2 62		251	69 17	185	69 17
1894	21,71,496	1,61,688	61,455	2 83	83,509	-22,051	50,00,000	3,80,217	1,44,679	2 89	237	61 98	166	61 97
1895	22,47,963	1,49,058	46,114	2 05	89,323	-43,209	50,00,000	3,18,074	1,02,821	2 06	209	67 68	138	67 64
1896	22,71,877	1,63,688	62,744	2 76	90,107	-27,363	50,00,000	3,61,363	1,38,532	2 77	241	61 75	157	61 63
1897	22,97,194	1,52,215	61,135	2 66	91,805	-30,671	50,00,000	3,31,379	1,33,070	2 66	223	59 84	144	59 84
1898	23,24,365	1,93,364	79,435	3 42	92,477	-13,042	50,00,000	4,17,910	1,71,375	3 43	234	58 81	181	58 80
1899	23,61,938	2,09,611	84,080	3 56	93,303	-9,223	50,00,000	4,47,225	1,79,444	3 59	307	59 89	194	59 88
1900	23,87,839	2,55,120	1,27,832	5 33	95,293	+32,039	50,00,000	7,90,489	2,67,288	5 35	375	50 12	332	50 06
1901	25,46,891	2,92,861	1,44,235	5 66	98,989	+45,246	50,00,000	5,85,152	2,88,838	5 77	430	50 75	254	50 64
1902	28,02,330	3,53,111	1,71,236	6 11	1,06,632	+6,604	50,00,000	6,30,030	3,16,683	6 88	518	51 51	274	49 74
1903	30,92,697	3,77,177	1,91,443	6 19	1,17,285	+7,458	50,00,000	6,81,912	3,21,328	6 48	559	49 48	327	48 81
1904	31,52,907	3,95,734	1,98,066	6 28	1,20,127	+77,939	50,00,000	6,43,742	3,22,874	6 45	533	50 14	279	49 81
1905	31,76,930	3,25,313	1,67,805	5 27	1,23,241	+44,061	50,00,000	5,21,943	2,67,939	5 36	477	45 57	227	48 16

5(d) Bhopal-Ujjain railway (5' 6" gauge)—

Details of construction—

This railway is 113 27 miles long. Its construction was sanctioned in 1892 and it was opened in 1895.

Permanent way—The permanent-way consists of 75-lb flat-footed steel rails on transverse steel sleepers

Ballast—The line is fully ballasted throughout with broken stone

Fencing—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings

Curves—There are no curves with a radius of less than 990 feet

Gradients—The ruling gradient is 1 in 150

Terms of contracts—

The Bhopal-Ujjain and Bina Goona Baran railways are worked under the following —

Agreements of—15th July 1896 } (between the Government of Her Highness the Begum of Bhopal and that of His
4th August 1896 } Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway
12th May 1899 } Company for working.

20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working.

16th March 1905 (between the Tonk and Gwalior Durbars) for purchase by the latter of that section of the Goona-Baran Railway which lies within the Tonk State

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company

The general conditions of the agreements are as follows —

Government aid—The line from Bina to Baran is owned jointly by the Durbars of the Gwalior and Kotah States, the Gwalior Durbar having purchased the portion which originally belonged to the Tonk Durbar and that from Bhopal to Ujjain by the Bhopal and Gwalior States.

Currency of agreements—The agreements may be terminated on the expiry of ten years from the dates of the opening of the railways, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party

Terms of working—The Company retains 50 per cent of the gross receipts of the railway of each half year, and receives rent for works, &c., in sole and joint use at Bina and Ujjain Junctions respectively, and rent for the telegraph lines and instruments when not the property of the railway. (These terms are applicable to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Gwalior State, except in the case of that portion which originally belonged to the Tonk Durbar and was subsequently purchased by the Gwalior Durbar.)

APPENDIX 38—*contd*

History of railways constructed and in progress
 [For Index see page 106]

Number Main head 5
Sub heads (a) to (h) GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

5 (d) Bhopal-Ujjain railway (5' 6" gauge)—*concl'd*

Terms of contracts—*concl'd.*

The Company retains out of the gross receipts a sum (which includes any single item of capital expenditure not exceeding Rs 1,000 to be classed as a 'Minor Work', subject to a maximum charge on such account of Rs 20 per mile open in each half-year) bearing the same percentage to the entire gross receipts of the railway for each half-year as the aggregate working expenses of the whole system of the Company (including the railway) bear to the gross receipts of that system for the same half-year (These terms are applicable to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Bhopal and Kotah Durbars, and to that portion which originally belonged to the Tonk Durbar and was subsequently purchased by the Gwalior Durbar)

Rates and fares—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Earnings per mile per week	Pro of exp to earnings.
1892	Rs 88,462	Rs "	Rs.		Rs	
1893	22,76,863	"	"			
1894	53,53,849	"	"			
1895	63,69,331					
1896	77,77,604	3,69,114	1,80,218	2 32	63	51 17
1897	75,56,180	3,72,337	1,84,560	2 45	63	50 40
1898	75,85,789	4,16,910	2,05,051	2 70	71	50 82
1899	76,54,290	5,82,341	2,77,911	3 63	99	52 28
1900	76,88,020	9,46,349	4,65,681	6 06	161	50 79
1901	77,61,569	5,45,956	2,62,044	3 38	93	52 00
1902	78,02,855	5,82,063	2,92,357	3 75	99	52 36
1903	78,11,402	4,44,766	2,23,049	2 86	76	49 85
1904	78,14,670	4,54,721	2,27,387	2 91	77	49 99
1905	78,35,712	6,08,240	3,06,659	8 91	103	51 23

TABLE II

5 (e) Bina-Goona-Baran railway (5' 6" gauge)—

Details of construction—

This railway is 145 63 miles long Its construction was sanctioned in 1892 and it was opened in 1899

Permanent-way—The line is laid with 75-lb flat-footed steel rails on deodar sleepers

Ballast—The line is ballasted with broken stone and laterite

Fencing—The line from Bina to Goona is fenced The Goona-Baran section is unfenced except at stations.

Curves—There are no curves with a radius of less than 990 feet

Gradients—The ruling gradient is 1 in 125

Terms of contract—The terms of the Bhopal-Ujjain railway, [5 (d)], apply

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Earnings per mile per week	Pro of exp to earnings
1891	Rs 51,905	Rs "	Rs			
1892	2,57,611	"	"			
1893	35,18,701					
1894	47,79,618					
1895	49,81,035					
1896	54,16,074	91,140	36,821	0 68	24	59 60
1897	87,73,621	1,02,386	43,446	0 50	27	57 57
1898	97,66,068	1,30,004	58,040	0 59	35	55 36
1899	99,31,680	2,67,359	1,26,108	1 27	43	52 83
1900	1,00,21,605	4,34,817	2,20,490	2 20	57	49 29
1901	1,00,43,256	2,52,716	1,22,970	1 22	33	51 34
1902	99,14,412	2,38,825	1,19,792	1 21	32	52 71
1903	99,62,459	3,21,585	1,62,417	1 63	42	49 49
1904	99,87,016	3,91,886	1,97,745	1 98	52	49 54
1905	99,90,394	3,68,669	1,68,121	1 88	49	50 68

TABLE II

5 (f) Indian Midland railway (5' 6" gauge)—

Details of construction—

The open mileage of the Indian Midland railway is 807 90 miles, which may be divided into main line (Bhopal to Agra Road), 316 63 miles, and branches, 491 27 miles

Section was first given to the construction of this line in 1876 and the main line was opened throughout in 1889.

Besides the above there are 2 24 miles under construction.

Permanent-way—The whole of the main line, the Manikpur branch, the Cawnpore branch from Jhansi to mile 326 64, and from Bina to Katni, are laid with 80-lb flat-footed steel rails on cast iron pot sleepers The Cawnpore branch from mile 326 64 to Hamirpur Road is laid with East Indian railway 75-lb double-headed steel rails on Denham Olpherts' sleepers The East Indian railway type rails and Denham Olpherts' sleepers are being gradually renewed with Indian Midland railway 80-lb flat footed steel rails and cast iron oval pots

Ballast—The line is ballasted with gravel, laterite, kunkur or stone

Fencing—The main line is fenced throughout and the branches are partially fenced.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 108]

Main head 5
Number sub heads (a) to (h) GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

5 (f) Indian Midland railway (5' 6" gauge)—*concl'd*Details of construction—*concl'd**Curves*—There are no curves with a radius of less than 990 feet*Gradients*—The ruling gradient between Bhopal and Jhansi is 1 in 200, between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur 1 in 125. The Jhansi Cawnpore branch is practically level, except at bridge approaches where the gradients are 1 in 250 and 1 in 300, and between Jhansi and Garhman where it is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts—

Contracts of—2nd October 1885—Indian Midland Railway Company's principal contract,

18th March 1890—Contract for the acquisition of the Scindia railway.

18th June 1896—Contract for the Saugor-Katni railway.

21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

Government aid—Interest at 4 per cent per annum in sterling is guaranteed on £3,000,000 share capital. On further capital that may be required the guarantee to be 4 per cent or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system; and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company raising only the amount required for expenditure in England. Land was provided free.*Currency of contracts*—(1) *Indian Midland railway contract*—The contract of 1885 may be determined by Government giving 12 months' previous notice on the 31st December 1910, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations, or if the line be worked at a loss for not less than three half-years continuously. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900, but the Indian Midland Railway Company's right to a 4 per cent guarantee on share capital and one-fourth share of surplus profits remains in full force till the termination of either the contract of 1885 or that of 1900.(2) *Scindia and Saugor-Katni railways contracts*—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental.*Power of Company to surrender contract*—Nil*Terms of working*—From the gross earnings for any calendar year will be deducted working expenses, and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.*Rates and fares*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Interest	Company's share of net earnings	Gain or loss to the State	SCINDIA		INDIAN MIDLAND	
								Earnings per mile per week	Pro of exp to earnings	Earnings per mile per week	Pro of exp to earnings
1878		Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	
1879	73,22,551	90,916	-38,772		3,06,178		-3,37,950	54	133 30		
1880	81,63,253	2,01,823	20,129	0 25	3,57,620		-3,37,491	58	58 05		
1881	38,16,663	3,01,681	78,842	0 91	3,48,809		-2,70,467	81	77 35		
1882	87,63,714	3,29,299	92,231	1 05	3,47,303		-2,55,072	85	71 99		
1883	92,92,537	3,38,511	1,59,716	1 72	3,56,750		-1,97,034	87	52 82		
1884	1,18,68,111	3,68,326	1,72,603	1 45	3,74,122		-2,01,519	95	53 14		
1885	1,60,14,107	3,91,081	1,99,680	1 24	6,48,112		-4,48,432	101	49 33		
1886	2,48,06,293	3,91,832	2,14,526	0 86	18,69,268		-16,51,712	101	49 69	56	82 03
1887	5,10,96,457	6,32,204	2,78,043	0 54	20,00,184		-17,22,411	117	46 62	81	80 63
1888	6,96,63,213	10,27,638	3,74,204	0 54	28,55,458		-24,81,284	95	47 74	99	72 53
1889	7,84,45,085	30,69,255	6,33,111	0 81	31,24,456		-24,91,045			92	77 32
1890	8,32,79,427	31,22,365	5,99,780	0 72	36,09,286		-30,09,506			86	80 80
1891	8,52,46,148	41,62,361	13,52,172	1 59	53,12,200		-19,60,028			115	67 51
1892	8,65,79,006	44,77,625	17,26,260	1 99	37,23,995		-19,97,725			124	61 45
1893	8,71,62,843	44,59,033	17,00,409	1 95	41,40,191		-24,39,785			123	61 67
1894	8,78,06,437	52,22,039	22,02,334	2 52	42,59,915		-20,57,497			144	57 83
1895	8,81,49,985	44,91,707	16,48,360	1 87	45,97,495		-29,49,135			124	68 30
1896	9,25,53,896	48,51,951	20,17,329	2 18	44,23,983		-24,06,154			134	58 41
1897	9,77,94,421	54,89,540	24,05,565	2 46	42,53,693		-18,47,325			150	56 16
1898	9,96,74,805	56,25,823	25,11,911	2 52	39,99,986		-14,88,075			147	55 35
1899	10,16,34,072	64,77,226	27,82,950	2 74	39,66,461		-11,83,511			152	57 03
1900	10,31,35,002	90,60,560	48,72,287	4 72	39,18,460		+10,53,827			213	46 23
1901	10,58,27,051	82,4,068	42,50,587	4 02	38,82,661	1,68,164	+1,79,562			199	48 43
1902	10,62,11,714	90,49,628	44,86,267	4 22	41,04,505	7,330	+3,74,432			209	50 43
1903	10,93,96,302	80,86,118	40,92,912	3 73	41,85,502	2,062	-34,622			180	49 35
1904	11,22,35,779	82,90,712	41,48,862	3 70	42,53,767		-1,10,905			183	49 96
1905	11,81,43,178	79,91,323	40,84,528	3 61	42,77,173		-1,92,645			178	48 89

APPENDIX 38—*contd*

History of railways constructed and in progress.

[For Index see page 106]

Number ^{Main head}_{Sub heads (a) to (h)} 5 GREAT INDIAN PENINSULA RAILWAY SYSTEM—*concl.*

5 (g) Gwalior Light railway (2' 0" gauge)—

Details of construction—

The open mileage of this railway is 183 53 miles, and may be divided into the following sections—(1) Gwalior to Sipri, 73 81 miles, (2) Gwalior to Bhind, 52 33 miles, and (3) Gwalior to Dabalgaon, 57 39 miles. The several sections were opened in 1899, 1899 and 1904, respectively.

Besides the above there are 66 66 miles under construction.

Permanent-way—The permanent-way consists of 30-lb flat footed steel rails, laid on sal and steel trough sleepers.

Ballast—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing—The line is fenced between Gwalior and Morai only.

Curves—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

Gradients—The ruling gradient is 1 in 60.

Terms of contract—

The railway is worked under the following agreement—

Agreement of—11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

The general conditions of the agreement are as follows—

Government aid—Nil. The Gwalior Light railway is the property of the Gwalior Durbar.

Currency of contract—Either party may determine the agreement by giving three months' notice.

Terms of working—The gross receipts are collected and treated as receipts of the Indian Midland Railway Company and from them are deducted the actual expenditure in the Traffic and Audit departments for station and train staff, audit clerks, on printing and stationery and stores consumed, and all other expenses connected therewith and 5 per cent per annum for construction and maintenance of accommodation required for the exclusive use of the Light railway, 7½ per cent for ballast, permanent-way, etc., including maintenance and renewal plus 15 per cent to cover supervision and general charges other than those rendered in the accounts. The balance is paid over to the Gwalior Durbar.

Rates and fares—Rates and fares are the same as those in force on the Great Indian Peninsula railway.

Statistics of working—

TABLE I.

Calendar year	Capital outlay to end of each year	Gross earnings.	Net earnings.	Per cent on capital outlay	Earnings per mile per week	TABLE II	
						Rs.	Proportion of expenses to earnings
1896		2,166					
1897		1,03,553					
1898		9,30,815					
1899		22,79,267	4,094	—4,113		6	258 32
1900		27,10,557	84,617	—137		13	100 16
1901		31,07,277	82,927	—520		13	100 63
1902		31,77,104	1,09,577	9,346	0 33	17	91 47
1903		41,76,053	1,66,002	68,226	1 63	25	58 90
1904		46,63,903	1,83,284	52,501	1 13	23	71 36
1905		54,72,817	1,89,735	52,745	0 96	20	72 20

5 (h) Matheran Light railway (2' 0" gauge)—

Details of construction—

The line, from Neral station on the Great Indian Peninsula railway to the hill station of Matheran, will be 12 79 miles long.

Its construction by Mr Abdul Husein Adamjee Peerbhoy of Bombay has been authorized by an order contained in the Bombay Government, Public Works Department (Railway), Notification No 34, dated the 28th July 1904. On completion the line will be worked by the Great Indian Peninsula Railway Company.

Terms of contract—

This railway will be maintained and worked under—

Terms—Contained in the order accompanying Bombay Government Notification No 34, dated the 28th July 1904.

The general conditions are as follows—

Government aid—Free provision of Government land.

Currency of agreement—Government may purchase the undertaking as a going concern from the promoter on 1st January 1940, or at the expiration of any subsequent period of 5 years, at 25 times the average net earnings of the undertaking for the 3 calendar years immediately preceding the date of purchase.

Terms of working—Not yet settled.

Rates and fares—Certain maxima have been fixed.

APPENDIX 38—contd.

History of railways constructed and in progress.
 [For Index see page 106]

Number Main head 6
Sub heads (a) to (i). **MADRAS RAILWAY SYSTEM—**

Lines comprising the system— The Madras railway system is made up of—

		Open line	Under construction or sanctioned for construction	Total
		Miles	Miles	Miles
(a)	Madras railway	(5' 6" gauge)	904 01	904 01
(b)	Kolar Gold fields railway	(5' 6" gauge)	9 83	9 83
(c)	Madras (North-East line) (Southern section of the East Coast (State) railway)	(5' 6" gauge)	497 19	497 01
(d)	Nilgiri railway	(7' 3½" gauge)	16 99	16 99
(e)	Shoranur Cochin railway	(3' 3½" gauge)	61 75	61 75
(f)	Tiruppur Krishnagiri railway	(3' 6" gauge)	25 33	25 33
(g)	A hikal Mangalore extension	(5' 6" gauge)	..	77 27
(h)	Salem Attur railway	(5' 6" gauge)	..	36 00
(i)	Morappur Dharmapuri railway	(3' 6" gauge)	..	16 14
		Total	1,515 20	1,662 02

Running powers—

Foreign lines over Home line—

		Miles
Bengal Nagpur railway, Waltair to Vizagapatam (including Wharf and Swamp lines)	for passenger and goods teams	{ 4 97
Southern Mahratta railway, Tadepalli to Bezwada		2 97
Nizam's Guaranteed State railway, distant signal at Bezwada to Bezwada station		0 83
	Total	8 82

6 (a) Madras railway proper (5' 6" gauge)—

Details of construction—

The open mileage of the Madras railway proper amounts to 904 01 miles. This may be divided into (1) the *South-West line*, main line (Madras to Azhikal), 472 73 miles, branches, 123 miles and (2) the *North-West line* (Arko-nam to Raichur), 308 28 miles. Of the above 48 13 miles are double line.

Sanction was first given to the construction of the South-West line in 1853 and it was opened through to Calicut in 1888. The North-West line was sanctioned in 1859 and was opened through to Raichur in 1871.

Permanent-way—The present type of permanent-way for the main line is 80-lb bull-headed steel rails, laid on cast iron pots, each weighing 112 lbs. The section, Calicut to Azhikal, is laid with 60 lb flat-footed steel rails on wooden sleepers.

Ballast—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves—The sharpest curve is of 700 feet radius.

Gradients—The ruling gradient between Madras and Mallapuram is 1 in 200, between Mallapuram and Calicut, 1 in 100 (except at Mallapuram Ghat where it is 1 in 70 and at Walayar Ghat where it is 1 in 62), between Calicut and Cannanore, 1 in 150, between Jalarpet and Bangalore, 1 in 100 (except at Kuppam Ghat where it is 1 in 66), between Podanur and Mettupalayam, 1 in 80, between Olavalkot and Palghat, 1 in 106, between Walayar Road and Ranipet, 1 in 150, and between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghat where it is 1 in 66).

Terms of contracts—

The Madras railway is worked under the following contracts—

Contracts of—22nd December 1852 (South-West line)

19th December 1855 (South-West line)

13th August 1858 (North-West line)

2nd January 1871 (Amalgamation)

18th January 1901 (Calicut-Azhikal extension)

1st November 1901 (Walayar Road (Aroor)-Ranipet branch)

The general conditions of the contracts are as follows—

Government aid—Guarantee of interest in sterling at 5 per cent for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land also was provided free of cost.

Currency of contracts—In ninety-nine years from 1st April 1857 the line reverts to Government on paying for the rolling-stock at its full value provided the Company had not previously given notice terminating the contract. Government may, within six months after the expiration of 25 or 50 years of the term, determine the contract by purchase at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fails to observe its obligations. Government repaying the capital expended.

Note—Government relinquished their right to determine the contract at the end of the 25th year and the only remaining opportunity of giving notice of purchase will be in 1907 within six months after 1st April.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 108]

Number Main head 6
Sub heads (a) to (t). MADRAS RAILWAY SYSTEM—*contd.*6 (a) Madras railway proper (5' 6" gauge)—*concl'd*Terms of contracts—*concl'd*

Power of Company to surrender contract—The Company may, at any time, surrender on six months' notice, receiving back the capital expended

Terms of working—As to the lines covered by the contract of 2nd January 1871, after deducting the working expenses (which include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year) the surplus profits, after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1s 10d per rupee, are divided equally between Government and the Company. As to the Calicut-Azhikal railway working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company, but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901 the covenants and provisions of the several principal Indentures apply to the Calicut-Azhikal railway.

Rates and fares—Under the contract Government fixed maxima rates and fares, which cannot be altered by Government until the net receipts exceed 10 per cent on the capital outlay. The fixed maxima rates cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year		Gross earnings Rs	Net earnings Rs	Per cent on capital outlay	Guaranteed interest (at current rates of exchange) Rs	Company's share of net earnings Rs	Gain or loss to the State Rs	Calend dar year	TABLE II	
	Rs	Rs								Earnings per mile per week	Proportion of expenses to earnings
1879	11,45,68,493	66,26,486	20,75,170	1 81	57,04,205	—36,29,035	1856	75	51 66		
1880	11,39,78,220	61,62,546	19,57,137	1 73	57,16,332	—37,59,195	1857	91	47 13		
1881	11,40,07,603	63,11,312	20,75,856	1 82	57,11,365	—36,40,509	1858	93	55 53		
1882	11,39,69,608	69,18,571	25,70,841	2 25	56,89,011	—31,18,170	1859	122	60 35		
1883	11,39,92,074	66,31,909	25,26,519	2 22	57,08,416	—31,81,867	1860	117	73 50		
1884	11,42,51,164	71,41,318	29,35,637	2 57	61,23,432	—34,87,745	1861	91	71 08		
1885	11,50,83,160	76,57,993	32,79,168	2 85	67,36,206	—34,57,038	1862	84	74 02		
1886	11,59,81,297	79,66,097	32,29,243	2 78	71,24,952	—38,95,709	1863	110	68 57		
1887	11,40,70,190	81,72,535	28,80,029	2 52	73,20,207	—44,40,178	1864	133	49 62		
1888	11,53,78,656	85,31,051	35,21,615	3 05	76,23,851	—41,02,236	1865	145	45 69		
1889	11,63,84,605	91,10,894	37,38,421	3 21	76,69,934	—39,91,513	1866	147	45 62		
1890	11,79,84,234	95,06,184	45,21,480	2 83	68,85,958	—23,64,478	1867	153	43 47		
1891	11,89,52,099	93,44,638	39,06,529	3 28	73,92,186	—34,85,657	1868	181	41 48		
1892	11,97,71,835	96,24,670	42,92,183	3 58	83,62,369	—40,70,236	1869	171	49 16		
1893	12,03,89,499	1,05,05,036	54,21,742	4 50	84,92,732	—50,60,990	1870	146	52 84		
1894	12,05,25,315	1,03,21,012	49,47,863	4 10	96,56,403	—47,08,606	1871	139	51 27		
1895	12,05,91,797	1,12,08,407	58,10,310	4 80	96,17,435	—38,60,320	1872	143	52 19		
1896	12,11,52,091	1,08,50,251	53,85,291	4 41	89,92,684	—36,07,393	1873	157	56 94		
1897	12,15,01,608	1,14,65,314	59,82,565	4 92	84,51,597	—25,90,167	1874	132	64 67		
1898	12,22,60,990	1,07,20,483	54,12,657	4 43	82,40,191	—29,18,080	1875	144	70 28		
1899	12,34,93,025	1,05,45,102	50,16,254	4 06	80,58,144	—30,41,90	1876	159	64 38		
1900	12,62,82,969	1,13,39,222	53,70,920	4 25	81,24,701	—1897	1877	225	59 26		
1901	13,13,51,379	1,14,86,803	57,95,603	4 40	83,15,733	—25,30,130	1878	218	52 41		
1902	13,50,23,683	1,18,41,074	57,91,420	4 29	84,41,464	—26,50,014	1879	214	58 20		
1903	13,64,08,517	1,26,81,022	55,67,864	4 08	84,39,831	—28,71,967	1880	221	55 40		
1904	13,71,10,000	1,37,65,064	62,73,135	4 57	86,30,058	—23,56,923	1881	241	48 39		
1905	13,85,08,936	1,39,16,956	58,69,047	4 24	87,03,239	—28,34,193	1882	237	52 66		

6 (b) Kolar Gold-fields railway (5' 6" gauge)—

The railway was constructed by the Mysore State in order to provide facilities for the gold-fields.

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 6
Sub heads (a) to (t) MADRAS RAILWAY SYSTEM—*contd*6 (b) Kolar Gold fields railway (5' 6" gauge)—*concl*

Details of construction—

The railway is 9.88 miles long. It connects Bowringpet with Marikuppam. Its construction was sanctioned in 1892 and it was opened in 1894.

Permanent-way—The line is laid with 76 lb bull-headed steel rails on cast iron pot sleepers.

Ballast—The line is ballasted with stone and sand, chiefly the former.

Fencing—The line is fenced throughout.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 66.

Terms of contract—

The railway is worked under the following agreement—

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance with effect from 1st January 1901.

The general conditions of the agreement are as follows—

Government aid—The line is the property of the Mysore State.

Currency of agreement.—The agreement to remain in force subject to six months' notice from either side on the 30th of June or the 31st of December of any year.

Terms of working—The Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system, including this line, bear to the gross earnings of that system, and 5 per cent. of the gross earnings of the railway for rolling-stock.

Rates and fares—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time on the Madras railway.

Statistics of working—

TABLE I.

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent. on capital outlay		
					Earnings per mile per week	Proportion of expenses to earnings
1892	27,661					
1893	5,27,634					
1894	6,46,175	75,771	29,273	4.46	249	61.87
1895	6,61,651	1,52,953	66,370	10.03	204	56.40
1896	7,45,004	1,55,917	67,287	8.50	299	59.25
1897	7,91,071	2,08,514	90,278	11.11	462	56.77
1898	8,09,537	2,01,002	82,143	10.15	392	59.82
1899	10,79,552	1,77,667	56,827	5.27	312	68.01
1900	10,77,901	2,05,892	67,093	6.22	402	67.88
1901	11,20,330	2,17,661	91,577	8.20	421	57.79
1902	11,38,480	2,16,629	84,844	7.45	422	60.83
1903	11,42,504	2,07,257	75,937	6.47	403	67.70
1904	11,73,128	2,41,744	89,290	7.61	476	68.54
1905	11,87,864	1,58,402	67,600	5.69	367	64.12

6 (c) Madras (North-East line) railway (5' 6" gauge)—

Details of construction—

The North-East line, which is the southern portion of the old East Coast railway, is 497.19 miles long. It consists of 485.26 miles of main line (Washermenpet to Waltair) and 11.93 miles of branches.

Its construction was sanctioned in 1890 and it was opened throughout in 1900.

Permanent-way—The permanent-way consists of 75-lb flat-footed steel rails laid on wooden and pea-pod steel sleepers. The wooden sleepers are gradually being renewed by cast iron pot sleepers.

Ballast—The line is ballasted with stone and sand, chiefly the former.

Fencing—The line is fenced only in the vicinity of towns, stations and level crossings.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient between Madras and Kistna canal is 1 in 200, and between Kistna canal and Waltair, 1 in 150.

Terms of contract—

The line is worked under the following contract—

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working.

The general conditions of the contract are as follows—

Currency of contract—The contract is to continue in force till the 31st December 1907. If the original contract with the Company, dated the 2nd January 1871, is for any reason terminated under the provisions thereof prior to the expiry of the term of this contract, the latter also will, *ipso facto*, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April of any year subsequent to 1904.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 6
Sub heads (a) to (e) MADRAS RAILWAY SYSTEM—*contd*6 (c) Madras (North-East line) railway (5' 6" gauge)—*concl*Terms of contracts—*concl*

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised, by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

Terms of working—The working expenses of the State railway are to include per half-year any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs 15 per mile of line open in each half year, a sum not exceeding Rs 10 for every mile of line open to traffic for Government supervision and control, and the following—

the actual expenditure incurred under the account heads of "Maintenance and renewal of permanent way,"

"Repairs of bridges, etc., wages and materials," "Conveyance of rivers," and "Repairs of staff quarters", the share of the general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the State railway,

the allowances and interest payable under the contract for the use by the State railway of the Company's terminal station at Madras,

the expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders,

The balance of the gross earnings to belong to Government

Rates and fares—Government exercise full control over rates and fares

Government have reserved the power to require, at six months' notice, the retransfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam

Statistics of working—

TABLE I

TABLE II

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings	REMARKS
1890	Rs 3,70,490	Rs	Rs		Rs 7,590	Rs -7,590			
1891	1,10,60,894				2,33,786	-2,33,786			
1892	2,60,11,121				7,41,621	-7,41,621			
1893	3,58,67,473	4,98,660	1,53,732	0 43	13,48,868	-11,92,136	68	84 69	
1894	4,29,47,727	14,80,678	1,50,921	0 34	15,92,900	-14,41,988	98	89 81	
1895	5,09,41,876	19,04,251	3,29,184	0 65	19,12,886	-15,83,702	90	82 71	
1896	6,83,64,948	24,60,573	5,39,901	0 85	23,72,875	-18,32,974	94	77 98	
1897	7,22,20,070	29,21,112	8,92,453	1 23	26,90,798	-18,44,843	100	69 53	
1898	8,24,02,259	28,10,742	6,69,831	0 81	30,98,828	-21,28,997	94	76 46	
1899	8,65,93,097	43,02,237	15,37,291	1 78	5,14,603	-19,77,308	104	65 11	
1900	8,80,71,731	64,04,543	20,54,794	3 01	34,46,555	-7,91,761	143	56 10	
1901	6,07,27,375	45,68,155	20,31,210	3 31	24,51,072	-4,19,862	176	65 62	
1902	6,16,89,605	45,46,551	10,19,128	2 62	24,46,167	-8,27,059	177	64 39	
1903	6,33,81,510	45,18,656	15,53,337	2 45	24,82,162	-9,28,825	176	65 62	
1904	6,43,05,839	50,43,367	15,61,875	2 43	25,44,80	-9,82,705	106	69 03	
1905	6,50,83,641	67,36,215	26,65,781	4 10	25,77,04	+88,277	262	60 43	

6 (d) Nilgiri railway (3' 3½" gauge)—

The old Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs 25,00,000 and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894, and in February 1896 a new Company was formed to purchase the line from the old Company and to supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Mettupalayam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by Government for £235,000 on the 1st January 1903.

Details of construction—

The open mileage of this railway is 16 99 miles. The line connects Mettupalayam with Coonoor. It was sanctioned in 1892 and was opened in 1899.

Besides the above there are under construction 11 50 miles, viz., from Coonoor to Ootacamund

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 6
Sub heads (a) to (i) MADRAS RAILWAY SYSTEM—*contd.*

6 (d) Nilgiri railway (3' 3½" gauge)—*concl'd*Details of construction—*concl'd*

Permanent-way—The permanent-way consists of flat footed steel rails, 50 lbs to the yard, laid on pyinkado sleepers. Between Kallar and Coonoor, there is also a central track rail with channel bars

Ballast—The line is ballasted with clean broken granite

Fencing—The line is fenced throughout

Curves—The sharpest curve is of 318 feet radius

Gradients—The ruling gradient is 1 in 12 5

Terms of contract—

The railway is worked by the Madras Railway Company under the following terms (approved in Government of India letter No 563 R T, dated the 27th June 1903)—

Government aid—The line is the property of the State

Currency of agreement— } The agreement may be terminated at any time on six months' notice from either
Power to determine agreement— } party

Terms of working—The Nilgiri railway to pay actual outlay on engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working the Madras railway to receive 25 per cent of gross earnings, plus 10 per cent of the net receipts

Rates and fares—Certain maxima have been fixed within which the Company is permitted to vary rates

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent. on capital outlay	Subsidy from Government	Total income	Percentage of total income on capital outlay	Interest	Gain or loss to the State	Farnings per mile per week	Proportion of expenses to earnings
1890	Rs 67,850				Rs	Rs		Rs	Rs		
1891	2,89,134										...
1892	8,89,71										
1893	15,50,000										
1894	18,50,000										
1895	22,60,000										
1896	16,92,610										
1897	36,81,977										
1898	44,51,035										
1899	47,57,944	84,448	20,209	0 42	24,392	41,600	0 93			175	76 06
1900	48,96,490	1,76,032	86,612	1 77	23,006	1,19,443	2 44			200	42 63
1901	48,74,254	2,41,336	1,37,893	2 83		1,37,883	2 83			275	42 87
1902	49,03,431	3,09,063	1,12,111	2 28		1,12,111	2 28			352	63 73
1903	35,24,265	2,74,903	73,958	2 10		73,998	2 10			311	73 09
1904	35,88,423	2,90,129	66,162	1 85		66,162	1 85	1,65,497	-91,509	328	77 20
1905	43,86,192	3,15,492	48,972	1 12		48,972	1 12	1,33,354	-67,222	357	84 18
								1,30,878	-86,906		

6 (e) Shoranur-Cochin railway (3' 3½" gauge)—

Details of construction—

The railway is 64 75 miles long. It connects Shoranur with Ernakulam. It was sanctioned in 1899 and opened in 1902

Permanent-way—The permanent-way consists of 41½-lb flat-footed steel rails on wooden sleepers.

Ballast—The line is ballasted throughout with stone and sand, chiefly the former.

Fencing—The line is fenced in the vicinity of towns, stations and level crossings

Curves—The sharpest curve is of 518 57 feet radius

Gradient—The ruling gradient is 1 in 80

Terms of contract—

The Shoranur-Cochin railway is worked under the following agreement—

Agreement of—1st January 1901 (between His Highness the Raja of Cochin and the Madras Railway Company) for construction and working

The general conditions of the agreement are as follows—

Government aid—The line is the property of the Cochin State

Currency of agreement—This agreement is to remain in force until the termination of the agreement, dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company

Terms of working—The Company charges for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur Cochin railway. After providing, from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Durbar and the Madras Railway Company in the proportion of four-fifths to the Durbar and one-fifth to the Company

Rates and fares—The same as are generally applicable from time to time to the system of railways worked by the Company

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 6
Sub heads (a) to (i) MADRAS RAILWAY SYSTEM—*concl*

6 (e) Shoranur-Cochin railway (3' 3½" gauge)—*concl*

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs	Rs		Rs	
1898	53,921					
1899	80,927					
1900	28,47,394					
1901	50,82,250					
1902	63,66,301	1,84,845	73,290	115	69	45 64
1903	64,41,390	3,52,964	1,98,023	3 07	103	43 90
1904	67,88,610	3,92,782	1,94,244	2 86	117	50 55
1905	68,40,214	3,86,945	1,61,395	2 86	115	53 29

6 (f) Tirupattur-Krishnagiri railway (2' 6" gauge)—

Details of construction—

The railway is 25 38 miles long It was sanctioned in 1902 as a famine feeder line and was opened in 1905

Permanent-way—The permanent way consists of 30 lb flat-footed steel rails laid on cross sleepers of Malabar teak*Ballast*—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2" gauge*Fencing*—The line is unfenced*Curves*—The sharpest curve is of 955 feet radius*Gradients*—The ruling gradient is 1 in 67

Terms of contract—

The line is worked under the following contract —

Contract of—4th October 1904 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working

The general conditions of the contract are as follows —

Government aid—The line is the property of the State*Currency of contract*—The contract is to continue in force till the 31st December 1907 but may be terminated after twelve months' notice on the 1st April of any year.*Terms of working*—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs 1,000 classed as a "Minor work," subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year, a sum not exceeding Rs 40 for every mile of open line for Government supervision and control, the Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system including this line bear to the gross earnings of that system, provided that such share shall in no case be less than an average sum of Rs 35 per mile per week The balance of the gross earnings to belong to Government*Rates and fares*—Government exercise full control over rates and fares

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of the year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs	Rs		Rs	Rs	Rs	
1905	10,63,690	12,810	-1,067		18,802	-19,869	81	103 31

6 (g) Azhikal-Mangalore railway (5' 6" gauge)—

Details of construction—

The railway is 77 27 miles long It was sanctioned in 1901 and is under construction.

6 (h) Salem-Attur railway (3' 6" gauge)—

Details of construction—

The railway is 36 06 miles long. It was sanctioned in 1903 as a famine feeder line, but the commencement of work has not yet been authorised

6 (i) Morappur-Dharmapuri railway (2' 6" gauge)—

Details of construction—

The railway is 18 14 miles long It was sanctioned in 1902 as a famine feeder line and was opened in January 1906

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106.]

Number Main head 7. Sub head (a). NAGDA-MUTTRA RAILWAY (5' 6' gauge)—

Details of construction—

This railway, from Nagda to Muttra, is under construction by the State. It will be 313 08 miles long. Sanction to its construction was given in 1905.

Number M head 8. Sub heads (a) to (c). NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—

Lines comprising the system.—The Nizam's Guaranteed State railway system is made up of—

- (a) Nizam's Guaranteed State railway (5' 6" gauge)
- (b) Bezwada Extension railway (5' 6" gauge)
- (c) Hyderabad Godavari Valley railway (3' 3½" gauge)

	Open line Miles
330 14	
20 53	
351 13	
Total	741 85

Running powers—

Home line over foreign line —

Distant signal at Bezwada to Bezwada station, Madras (North East line), for passenger and goods trains

0~9

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884 it was worked by State agency, and from January 1885 by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast (State) railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast (State) railway. It was transferred back to the Company for working from the 1st January 1901.

8 (a) Nizam's Guaranteed State railway proper (5' 6" gauge)—

Details of construction—

The open mileage of the Nizam's Guaranteed State railway proper is 330 14 miles, which may be divided into main line (Wadi junction to the British frontier), 310 10 miles, and branches, 20 04 miles. Its construction was first sanctioned in 1871 and it was opened through in 1889.

Permanent way—The first 47 miles from Wadi are laid with 75-lb bull-headed steel rails on cast iron pot sleepers and the following 9 miles with 68-lb double-headed steel rails on cast iron pot sleepers. The remainder of the line is laid with 66½-lb flat footed steel rails on steel per-pod sleepers, with the exception of the mixed (5' 6" and 3' 3½") gauge line from Secunderabad to Hyderabad which has wooden sleepers under the same section of rail.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station-yards are fenced.

Curves.—The sharpest curve is of 1,300 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following contract.—

Contract of—27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

The general conditions of the contract are as follows.—

Terms of contract.—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon), His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land was provided free of charge.

Note.—The guarantee of His Highness the Nizam's Government on the share capital of £2,000,000 and £211,600 four per cent debentures expired on the 25th June 1904.

Currency of contract.—The contract is current for a period of 99 years, and, on expiry by effluxion of time, the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The Nizam's Government has the option of purchasing the line on the 1st January 1911, 1931 or 1951, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent thereon. In case of breach of contract by the Company the Nizam's Government may give six months' notice and resume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Terms of working.—From gross earnings are deducted working expenses, and during the guaranteed period the net earnings are applied in the first instance to repayment of the annuity paid in the same half-year. Of the residue one moiety is utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance is paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance one half will be paid to the Nizam's Government, the remaining half being made over to the Company.

Rates and fares.—The rates and fares not to be, unless otherwise agreed between His Highness' Government and the Company, in excess of the rates and fares which were in existence on the Great Indian Peninsula railway at the time the contract was made.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 8
Sub heads (a) to (c). NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*contd*

8 (a) Nizam's Guaranteed State railway proper (5' 6" gauge)—*contd*

Statistics of working—

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	TABLE II (Includes Bezwada Extension)	
					Earnings per mile per week.	Pro of exp to earnings
1879	Rs 1,16,46,997	Rs 6,94,401	Rs 59,925	0.77	Rs 110	87.01
1880	1,21,90,870	7,02,716	2,48,604	2.04	112	68.08
1881	1,22,85,291	7,56,834	2,58,666	2.35	120	61.32
1882	1,22,27,794	8,59,418	3,75,099	3.07	141	56.35
1883	1,22,83,560	8,53,521	2,37,932	1.94	137	72.12
1884	1,23,08,720	9,72,917	4,70,227	3.82	155	63.02
1885	2,05,60,998	11,18,950	4,87,024	2.37	178	56.26
1886	2,71,49,342	18,81,077	6,91,524	2.56	143	49.71
1887	2,69,71,143	15,48,891	5,52,905	2.05	143	64.31
1888	3,55,11,854	17,76,075	7,57,467	2.13	116	57.35
1889	3,59,46,922	22,57,462	7,72,513	2.15	129	66.90
1890	3,77,11,194	25,07,263	10,39,590	2.76	140	59.74
1891	3,95,18,791	27,76,437	12,57,860	3.18	151	54.70
1892	3,95,48,395	27,80,612	13,24,959	3.35	151	52.35
1893	4,01,96,909	30,61,605	14,36,451	3.57	186	53.08
1894	4,02,33,826	32,56,885	16,22,028	4.03	177	50.20
1895	4,06,43,818	32,15,541	15,77,149	3.88	185	53.77
1896	4,08,24,737	33,03,522	17,28,196	4.24	187	50.02
1897	4,09,60,914	36,10,351	19,38,769	4.73	205	48.67
1898	4,10,54,449	39,07,612	22,74,580	5.54	221	44.20
1899	4,15,63,731	41,10,201	25,01,016	6.02	240	43.45
1900	4,17,49,124	49,12,056	28,41,985	6.81	286	41.52
1901	4,24,30,543	40,77,927	26,48,120	6.24	236	35.59
1902	4,28,69,527	41,06,494	26,52,533	6.25	254	39.89
1903	4,30,13,663	43,18,630	25,38,366	5.90	251	41.79
1904	4,32,66,412	43,32,440	27,90,690	6.47	252	36.18
1905	4,35,86,043	42,78,161	28,49,703	6.54	251	33.98

8 (b) Bezwada Extension railway (5' 6" gauge)—

Details of construction—

This railway is 20.58 miles long and extends from the Hyderabad frontier to Bezwada. Its construction was sanctioned in 1886 and it was opened in 1889.

Permanent way—The line is laid with 66½-lb flat-footed steel rails chiefly on steel pea-pod sleepers.

Ballast—The line is ballasted throughout with stone and sand.

Fencing—The line is fenced at stations only.

Curves—There are no curves with a radius of less than 1,900 feet.

Gradients—The ruling gradient is 1 in 100.

Terms of contract—

The line is maintained and worked for the same percentage of its gross earnings as the aggregate working expenses of the amalgamated undertaking of the 5' 6" gauge system bear to the aggregate gross earnings for the same half-year, plus 5 per cent of the gross earnings of the Bezwada extension railway for the use of rolling stock, and the cost of Government Audit establishment and interest on joint works at Bezwada.

Statistics of working—

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on Capital outlay	Interest	Gain or loss to the State	TABLE II	
							Earnings per mile per week	Pro of exp to earnings
1887	Rs 8,11,654	Rs	Rs		Rs 16,363	Rs -16,363		
1888	11,56,237				39,357	-39,357		
1889	13,46,302	76,671	16,326	1.21	53,530	-37,204		
1890	13,90,830	74,731	16,318	1.17	54,330	-38,212		
1891	14,11,077	87,367	28,699	2.03	56,266	-27,567		
1892	14,17,671	98,779	28,347	2.00	56,584	-23,237		
1893	14,21,456	1,04,386	32,972	2.39	56,888	-27,916	Included with the Nizam's Guaranteed State railway proper	
1894	14,26,901	1,71,016	71,270	5.00	57,122	+14,148		
1895	14,31,642	95,119	95,119	6.64	57,239	+37,880		
1896	14,35,588	73,057	38,496	2.68	57,406	-18,910		
1897	14,95,418	1,66,800	56,645	3.79	58,383	-1,738		
1898	15,01,943	1,64,061	95,390	6.35	59,569	+35,821		
1899	15,02,651	3,12,172	1,84,365	12.27	60,101	+1,24,264		
1900	15,02,618	8,56,446	2,88,989	15.90	60,106	+1,78,883		
1901	11,51,678	2,77,177	1,56,920	13.63	35,509	+1,21,420		
1902	11,60,425	2,69,668	1,40,929	12.08	46,375	+93,954		
1903	11,77,047	8,25,363	1,67,332	14.22	46,617	+1,20,715		
1904	11,75,731	2,93,153	1,53,353	13.01	46,893	+1,06,460		
1905	11,78,615	3,47,490	2,04,289	17.33	47,046	+1,57,193		

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 8
Sub heads (a) to (c) NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*concl'd*

8 (c) Hyderabad-Godavari Valley railway (3' 3½" gauge)—

Details of construction—

This railway connects Manmad with Hyderabad and is 391 13 miles long. Its construction was sanctioned in 1897 and it was opened through in 1901.

Permanent way—The permanent-way consists of 50-lb flat-footed steel rails on steel pea-pod and wooden sleepers from mile 302 to 363 and wooden sleepers only for the remainder.

Ballast—The line is ballasted throughout with stone, sand and moorum.

Fencing—The line is fenced from mile 377½ to 381 and at all stations.

Curves—The sharpest curve is of 1,433 feet radius.

Gradients—The ruling gradient is 1 in 133 3.

Terms of contract—

The railway is worked under the following agreement—

Agreement of—16th March 1897 (between His Highness the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction and working.

The general conditions of the agreement are as follows—

Terms of contract—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, the Nizam's Government paying thereon an annuity, and, in addition, a sum of one per cent per annum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway, after the expiration of the guaranteed period the interest payable thereon to be a first charge on the net earnings of the former line and a second charge on the surplus net earnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is provided for.

Currency of contract.—On expiry of the contract by effluxion of time the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a full valuation, revert to the Nizam's Government. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by the Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Power of Company to surrender contract—Nil.

Terms of working—From the gross earnings are deducted working expenses, and the net earnings are applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be returned by the Company, and of the balance one-half to be paid to the Nizam's Government the remaining moiety being dealt with as above.

Rates and fares—Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	TABLE II	
					Rs	Pro of exp to earnings
1896	3,74,350					.
1897	17 64,352					.
1898	80,55,416					.
1899	2,00,21,971	63,381	36,877	0 18	48	41 82
1900	2,81,94,817	10,63,023	4,20,826	1 81	70	60 41
1901	2,44,37,419	20,10,033	9,23,300	3 77	99	51 07
1902	2,57,75,220	22,68,013	9,67,892	3 76	112	57 70
1903	2,62,07,241	22,14,752	8,86,291	3 38	109	59 93
1904	2,64,85,096	22,11,781	7,74,804	2 93	109	64 87
1905	2,68,15,349	29,64,122	13,29,000	4 97	146	55 16

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number ^{Main head 9}
_{Sub heads (a) to (l)} • NORTH WESTERN (STATE) RAILWAY SYSTEM—

Lines comprising the system—The North Western (State) railway system is made up of—

	Open line	Under construction or sanctioned for construction	Total
	Miles	Miles	Miles
(a) North Western (State) railway (5' 6" gauge)	3,268 85	181 49	3,450 3
(b) Jammu and Kashmir (Native state section) (5' 6" gauge)	15 98	...	15 98
(c) Ludhiana Dhuri-Jalhal railway (5' 6" gauge)	78 66		78 66
(d) Rajpura Bhatinda railway (5' 6" gauge)	107 05		107 05
(e) Southern Punjab railway (5' 6" gauge)	425 33		425 33
(f) Southern Punjab "Ludhiana" Extension railway (5' 6" gauge)	77 05	77 45	155 12
(g) Khushalgarh Kohat Thal railway (2' 6" gauge)	91 73		91 73
(h) Nowshera Durgai railway (2' 6" gauge)	40 25		40 25
(i) Dandot Light railway (2' 0" gauge)	6 18	...	6 18
(j) Amritsar Patti railway (5' 6' gauge)	"	26 85	26 85
(k) Jullundur-Kapurthalla Sultanpur (British section)	Gauge not yet finally settled	6 80	6 80
(l) Jullundur Kapurthalla Sultanpur (Native state section)		22 02	22 02
Total	4,111 08	314 61	4,425 69

Running powers—

Home line over foreign line —	Miles
East Indian railway, Ghaziabad to Delhi, for passenger and goods trains	13 00

9 (a) North Western (State) railway proper (5' 6" gauge)—

Details of construction—

The open mileage of the North Western (State) railway proper is 3,268 85 miles, of which 168 36 miles are double line. This may be divided into (1) the Commercial section, main line (Ghazibabad to Peshawar and Lahore to Karachi), 1,444 70 miles, and branches, 699 58 miles, (2) Military section, Sind Sagar, main line (Lala Musa to Sher-Shah), 344 59 miles, and branches, 227 14 miles, (3) Military section, Sind Pishin (Ruk to Chiman), 336 03 miles, (4) Military section, " " " " " line (Sibi to Quetta), 86 74 miles, and branches, 35 74 miles, (5) Military section, Quetta-Nush " " " " " to Nushki, 83 29 miles, and (5) Peshawar-Jamrood branch, 11 04 miles. The first sanction to the main line of this railway was given in 1859. It was opened through to Peshawar in 1883 and from Lahore to Karachi in 1889.

There are 181 49 miles of single and 239 16 miles of double line under construction.

Permanent-way—The permanent-way is of various types. On the single line, of iron rails there are 60-lb flat-footed, 68-lb double headed, 60-lb bull headed, 82-lb double-headed and 68-lb bull-headed, of steel rails there are 70-lb flat-footed, 62-lb flat-footed, 75-lb flat-footed, 64-lb double headed, 68-lb double-headed, 75-lb double headed, 68-lb bull-headed, 84-lb bull-headed, 100-lb flat-footed, 77½-lb bull-headed, 73-lb bull-headed and 85-lb bull-headed. On the double line, of iron rails there are 68-lb double headed, of steel rails there are 68-lb double headed, 75-lb flat-footed, 77½-lb bull headed and 100 lb flat footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used.

Ballast—The line is ballasted throughout with sand, bricks and broken stone.

Fencing—The line is fenced from Karachi to Ghaziabad, Ruk to Jhatpat and Lahore to Lala Musa. The line between Lala Musa and Peshawar is partially fenced.

Curves—The sharpest curve is of 408 feet radius.

Gradients—The ruling gradient between Kotri and Rohri, and Sibi and Ruk is 1 in 500, between Ghaziabad and Lala Musa, and Kotri and Lahore, 1 in 400, between Karachi and Kotri, 1 in 189, and between Lala Musa and Peshawar, 1 in 100. The ruling gradients on the Sind-Sagar, Mari-Attock, Sind-Pishin, and Mushkaf-Bolan lines are 1 in 400, 1 in 80, 1 in 40 and 1 in 25, respectively.

Terms of contracts—

The line is owned and worked by the State

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 9
Sub-heads (a) to (l) NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.*9 (a) North Western (State) railway proper (5' 6" gauge)—*contd.*

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Annuity	Surplus profits paid to Company	Gain or loss to the State
1879	Rs 21,67,64,217	Rs 1,51,27,621	Rs 65,38,870	2.55	Rs 1,09,29,015	Rs	Rs	Rs -44,02,116
1880	2,20,35,401	1,00,30,006	75,55,501	3.02	1,11,30,010		21,122	Rs -36,02,490
1881	25,38,29,306	90,04,725	46,13,517	1.75	1,17,64,668			Rs -71,51,321
1882	77,49,41,670	82,43,072	67,06,011	2.11	1,05,63,712			Rs -17,67,701
1883	29,18,16,800	1,03,81,115	67,10,213	3.09	1,07,43,031			Rs -20,21,685
1884	20,20,27,775	1,07,68,748	68,21,631	3.02	1,18,06,701			Rs -30,0,0,0
1885	31,69,13,4,8	1,40,78,983	1,37,41,127	4.34	1,04,98,097	..	1,20,0,3	Rs -28,8,0,56
1886	33,88,68,533	2,53,60,001	1,10,92,630	3.51	1,14,07,148	Rs 53,00,733		Rs -47,1,0,04
1887	36,16,45,700	10,03,389	57,77,555	1.60	1,01,66,770	Rs 69,30,32		Rs -1,3,09,510
1888	37,60,58,623	2,67,70,306	83,66,698	2.23	1,09,18,039	Rs 63,4,756		Rs -1,03,99,00
1889	39,73,09,431	2,87,06,806	1,02,81,741	2.66	1,13,76,516	Rs 63,09,768		Rs -01,00,043
1890	41,51,67,150	2,73,09,035	1,02,57,601	2.47	1,16,66,595	Rs 74,54,323		Rs -69,63,30
1891	41,67,30,071	3,25,78,355	1,21,37,521	2.03	1,20,67,549	Rs 60,0,290		Rs -70,40,321
1892	42,71,00,6,0	2,64,3,065	91,50,000	2.21	1,24,23,030	Rs 80,81,076		Rs -1,19,59,146
1893	43,71,03,581	2,92,69,732	97,07,643	2.21	1,27,61,682	Rs 90,08,54	..	Rs -1,20,0,0,551
1894	44,78,05,025	3,23,14,037	1,23,25,181	2.86	1,31,63,720	Rs 1,03,59,215	..	Rs -09,97,3,3
1895	46,23,14,402	3,52,18,386	1,64,40,093	3.55	1,35,01,193	Rs 1,03,17,355		Rs -73,71,550
1896	47,61,00,602	2,91,41,740	1,18,60,400	2.40	1,47,35,47	Rs 86,43,598		Rs -1,19,0,0,000
1897	49,70,5,256	3,29,03,448	1,49,78,807	3.07	1,45,8,209	Rs 90,50,191		Rs -86,56,100
1898	49,37,11,910	3,76,01,912	1,85,74,360	3.76	1,50,41,4,0	Rs 80,35,840		Rs -51,02,046
1899	50,01,64,031	3,52,21,759	1,60,89,223	3.22	1,50,40,203	Rs 65,61,406		Rs -75,12,301
1900	50,57,26,113	3,15,23,237	1,92,10,151	2.61	1,54,25,104	Rs 8,76,683		Rs -1,07,8,0,0
1901	51,01,27,448	4,11,60,2,7	2,03,50,471	3.09	1,55,50,604	Rs 86,02,222		Rs -37,90,44
1902	52,53,16,081	4,22,10,0,0	1,73,70,001	3.31	1,59,60,500	Rs 85,81,455		Rs -71,60,0,1
1903	53,31,67,631	4,03,83,876	50,0,517	4.60	1,62,69,103	Rs 8,77,430		Rs +1,4,0,0,1
1904	54,52,80,8,3	6,16,60,310	3,2,0,2,000	5.02	1,67,34,700	Rs 85,77,430		Rs +6,60,7,0
1905	57,66,34,0,1	5,88,71,918	2,90,52,383	5.04	1,72,13,261	Rs 85,61,693		Rs +32,76,73

TABLE II

Calendar year	Sind, Punjab and Delhi 5' 6"	Punjab Northern 5' 6"	Indus Valley and Kandhar 5' 6"	Amritsar-Pathankot 5' 6'	North Western (State)		
					Commercial section	Military section	Entire line
1861	Rs 63	Rs 07,28	Rs	Rs	Rs	Rs	Rs
1862	112	79,50	..	..	..	..	..
1863	171	83,04	..	..	..	..	..
1864	170	67,26	..	..	..	..	..
1865	101	82,18	..	..	..	..	..
1866	110	76,15	..	..	..	..	..
1867	111	60,03	..	..	..	..	..
1868	112	9,60	..	..	..	..	..
1869	117	50,70	..	..	..	..	..
1870	140	76,16	..	..	..	..	..
1871	122	00,03	..	..	..	..	..
1872	131	6,77	..	..	..	..	..
1873	151	68,07	..	..	..	..	..
1874	101	5,35	..	..	..	..	..
1875	161	64,09	Rs 63,41	..	..	..	..
1876	166	67,03	101	77,27	..	..	..
1877	141	67,16	130	66,61	..	..	..
1878	134	64,50	109	99,36	Rs 66,122,07	..	..
1879	137	60,2	315	10,5	121	81,116	..
1880	16,0	3,2	65,92	300	83,2	203	71,115
1881	255	69,70	109	80,01	155	78,4,3	..
1882	28,	66,00	161	63,74	141	69,17	..
1883	29,	5,13	144	61,11	70,03	55,55	..
1884	190	61,26	139	72,34	210	69,40	61,6,78
1885	165	57,35	165	62,60	300	40,65	81,60,28
1886	188	..	..	..	..	..	..
1887	186	..	..	..	..	..	..
1888	185	..	..	..	..	..	..
1889	184	..	..	..	..	..	..
1890	183	..	..	..	..	..	..
1891	182	..	..	..	..	..	..
1892	181	..	..	..	..	..	..
1893	180	..	..	..	..	..	..
1894	179	..	..	..	..	..	..
1895	178	..	..	..	..	..	..
1896	177	..	..	..	..	..	..
1897	176	..	..	..	..	..	..
1898	175	..	..	..	..	..	..
1899	174	..	..	..	..	..	..
1900	173	..	..	..	..	..	..
1901	172	..	..	..	..	..	..
1902	171	..	..	..	..	..	..
1903	170	..	..	..	..	..	..
1904	169	..	..	..	..	..	..
1905	168	..	..	..	..	..	..

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head
Sub heads (a) to (l) NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd*

9 (b) Jammu and Kashmir (Native State section) (5' 6" gauge)—

Details of construction—

This line, which extends from the Kashmir frontier to the left bank of the Tawi river near Jammu, is 1593 miles long. Its construction was sanctioned in 1888 and it was opened in 1890.

Permanent way—The permanent-way consists of 75-lb flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast—The line is ballasted throughout with broken stone.

Fencing—The line is unfenced except at Srinagar station.

Curves—The sharpest curve is of 2,865 feet radius.

Gradients—The ruling gradient is 1 in 500.

Terms of contracts—

The railway is worked by the State under the following agreement—

Agreement—having effect from 1st January 1903 (between the Government of India and the Kashmir Durbar) for construction and working.

The general conditions of the agreement are as follows—

Government aid—Government allow this railway in addition to 44.5 per cent of the gross earnings of the Tawi-Suketgarh section a rebate payment on interchanged traffic to the extent necessary to give the Durbar a total dividend of 3½ per cent per annum on the actual expenditure to the end of the half year concerned as entered in rupees in the capital account of the said railway—subject to a maximum limit equal to the net earnings of the North Western (State) railway from traffic interchanged with this section.

Currency of agreement—The agreement is current for a period of five years from 1st January 1903 and is terminable thereafter on six months' notice by either side.

Terms of working—The North Western (State) railway work and maintain the line for 55.5 per cent of its gross earnings, which includes hire of locomotives and rolling stock necessary and cost of such minor works as are usually charged to revenue on the North Western (State) railway, subject to a limit of Rs 30 per mile per annum. The cost of additional works usually charged to capital to be found by the Durbar, no charge being made by the North Western (State) railway for supervision of the construction of such capital works except where special establishment is required.

Rates and fares—Rates and fares are those which are from time to time in force on the main line of the North Western (State) railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Rebate from North Western (State) railway	Total income	Percentage on total income	Earnings per mile per week	Proportion of expenses to earnings
1888	29,545								
1889	7,51,458								
1890	12,37,071	45,667	13,770	1.11					
1891	13,80,083	57,912	15,904	1.15					
1892	9,45,202	41,718	15,444	1.63					
1893	9,56,327	51,637	14,932	1.50					
1894	9,59,73	60,463	17,555	1.83					
1895	9,60,(10)	56,239	25,026	2.60					
1896	9,60,011	55,185	24,558	2.55					
1897	9,65,151	48,509	21,587	2.24					
1898	9,62,846	48,164	21,433	2.23					
1899	9,60,820	51,132	22,072	2.39					
1900	9,60,492	55,215	23,571	2.56					
1901	9,60,626	52,484	23,355	2.43					
1902	9,62,471	51,815	23,080	2.40					
1903	9,62,284	54,881	24,422	2.54	9,258	33,660	3.50	66	55.50
1904	9,62,206	56,231	21,023	2.60	8,65	31,678	3.50	68	55.50
1905	9,62,208	66,842	29,745	3.09	4,540	34,285	3.57	80	55.50

TABLE II

Included with the North Western (State) railway

9 (c) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)—

Details of construction—

This railway is 78.66 miles long. Its construction was sanctioned in 1899 and it was opened in 1901.

Permanent way—The permanent way consists of 75-lb flat footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast—The line is ballasted throughout with broken brick.

Fencing—Only the station yards and about 100 feet each side of level crossings are fenced.

Curves—The sharpest curve is of 1,364 feet radius.

Gradients—The ruling gradient is 1 in 40.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 9
Sub heads (a) to (l) NORTHERN (STATE) RAILWAY SYSTEM.—*contd.*9 (c) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)—*concl*

Terms of contract—

The railway is worked under the contract of 6th September 1899 (between the Secretary of State and the Maler Kotla and Jind Durbars) for construction and working

The general conditions of the contract are as follows —

Government aid — The line was constructed at the cost of the Maler Kotla and Jind Durbars

Currency of contract — The contract is terminable on the 1st January or 1st July in any year on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western (State) railway will give to the Maler Kotla and Jind Durbars possession of the railway, works, surveys and stores, and, on this being done, the Maler Kotla and Jind Durbars will indemnify the North Western (State) railway from all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon

Terms of working — After deduction of 55 per cent of the gross receipts for working expenses, the balance is paid to the Maler Kotla and Jind Durbars to be divided between them in the proportion of $\frac{1}{6}$ th and $\frac{5}{6}$ ths, respectively

Rates and fares — Rates and fares as in force on the North Western (State) railway

Statistics of working—

Calendar year	TABLE I				TABLE II		REMARKS
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings	
	Rs	Rs	Rs		Rs		
1901	43,10,407	2,02,297	91,034	2 11	63	50 00	The decrease in Capital outlay in 1903 was due to credits
1902	43,31,799	4,05,005	1,82,252	4 21	99	55 00	
1903	41,19,964	3,15,026	1,11,762	3 44	77	55 00	
1904	41,19,634	3,46,0.9	1,55,727	3 78	85	55 00	
1905	41,22,517	5,15,007	2,31,753	5 62	126	50 00	

9 (d) Rajpura-Bhatinda railway (5' 6" gauge)—

Details of construction—

This railway is 107 05 miles long. Its construction was first sanctioned in 1883 and it was opened through in 1889

Permanent-way — The line from Rajpura to Patiala is laid with 68-lb bull headed steel rails on deodar sleepers and from Patiala to Bhatinda with 75-lb flat footed steel rails on creosoted pine and deodar sleepers

Ballast — The line is ballasted throughout with broken brick

Fencing — The line is fenced between Rajpura and Patiala and at station yards and 100 feet on each side of level crossings between Patiala and Bhatinda

Curves — The sharpest curve is of 1,146 feet radius

Gradients — The ruling gradient is 1 in 500

Terms of contract—

The railway is owned by the Patiala State and is worked by the North Western (State) railway under the following —

Contract of — 30th January 1893 (between the Secretary of State and the Patiala Durbar) for maintenance and working

Government of India letter No 817 R T of 5th October 1903, sanctioning the reduction in the percentage of gross earnings to be retained by North Western (State) railway for working, from 55 to 52, with effect from 1st January 1904

The general conditions of the contract are as follows —

Government aid — The line has been constructed at the cost of the Patiala Durbar

Currency of contract — The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract, the North Western (State) railway will give to the Patiala Durbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Durbar will indemnify the North Western (State) railway from all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon

Terms of working — 55 per cent of the gross earnings to end of 1903 and 52 per cent thereafter

Rates and fares — Rates and fares as in force on the North Western (State) railway

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number ^{Main head 9}
 Sub-heads (a) to (l) NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.*

9 (d) Rajpura-Bhatinda railway (5' 6" gauge)—*concl'd*

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year		Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	TABLE II.
	Rs	Rs					
1884	11,12,259	5,111	—496			17	
1885	12,29,141	48,769	—4,255			59	109 72
1886	12,29,141	64,623	18,816			78	106 09
1887	12,43,250		1,425		1 12		78 63
1888	22,61,990		18,610		1 24		
					0 82		
						Included with North West railway	
1889	62,83,918	1,09,480	58,403	0 93		74	55 00
1890	65,60,341	5,66,916	2,57,126	3 99		101	55 00
1891	65,81,553	7,19,859	3,23,937	4 92		129	55 00
1892	66,41,582	5,61,053	2,53,824	3 82		100	55 00
1893	67,26,911	6,84,347	3,07,956	4 58		122	55 00
1894	67,01,669	12,59,032	5,66,565	8 45		224	55 00
1895	67,02,457	13,18,902	5,93,506	8 86		235	55 00
1896	66,95,813	9,97,826	4,49,022	6 71		178	55 00
1897	66,96,141	6,96,977	3,13,617	4 63		124	55 00
1898	67,01,320	7,02,637	3,16,187	4 72		120	55 00
1899	67,05,785	6,79,520	3,05,784	4 56		122	55 00
1900	67,07,785	6,93,904	3,12,211	4 66		125	55 00
1901	67,10,823	8,00,612	3,87,259	5 77		150	55 00
1902	67,12,97	8,10,947	3,78,426	5 64		171	55 00
1903	67,18,890	9,64,002	4,33,801	6 46		173	55 00
1904	67,23,431	10,67,125	5,12,604	7 62		192	52 00
1905	67,18,831	12,53,290	6,01,628	8 95		225	52 00

9. (e) Southern Punjab railway (5' 6" gauge)—

The railway runs from Delhi, via Bhatinda, to Samasata on the North Western (State) railway, shortening the distance by railway between Delhi and Karachi by 187 miles as compared with the route via Umballa and Lahore.

Details of construction—

The open mileage amounts to 425 33 miles, which may be divided into main line (Delhi to Samasata), 401 95 miles, and branch, 23 38 miles. The main line was opened through in 1897.

Permanent-way—The permanent-way consists of 75-lb flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast—The line is ballasted throughout with broken brick.

Fencing—Only the station yards are fenced.

Curves—The sharpest curve is of 9,100 feet radius.

Gradients—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts—

Contract of—13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

4th October 1905 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Southern Punjab "Ludhiana" extension, 9 (7).

The general conditions of the contracts are as follows—

Government aid—Government allow the Company in respect of each half-year, by way of rebate on the net earnings of the North Western (State) railway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western (State) railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the Company's net earnings, make up an amount equal to interest for the year at the rate of 3½ per cent on the actual rupee expenditure charged in the capital account. Land was provided free of cost to the Company.

Currency of contract—Government may, by giving twelve months' notice, determine the contract on the 31st December 1923, or at the expiration of any subsequent period of ten years, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent the total capital expenditure of the Company in sterling, nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1948, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

APPENDIX 38—*contd.**History of railways constructed and in progress*
[For Index see page 106]

Number Main head 9
Sub heads (a) to (l) NORTHERN (STATE) RAILWAY SYSTEM—*contd.*

9 (e) Southern Punjab railway (5' 6" gauge)—*concl'd*

Terms of contracts—*concl'd*

Power of Company to surrender contract—Nil

Terms of working—Government undertake to work and maintain the line and provide rolling-stock at 52 per cent of the gross earnings. Surplus profits in excess of 3½ per cent per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western (State) railway take all receipts from traffic between its own stations including Delhi and Simisata, but excluding the Patiala State railway, which passes over the Southern Punjab railway. The Company, in addition to its earnings from local and interchanged traffic, receives, where it forms part of the shortest route, its mileage proportion of traffic between the North Western (State) railway and foreign lines.

Rates and fares—Rates and fares to be fixed by Government within the maxima and minima rates and fares in force on the North Western (State) railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Rebate from N W (S) ry	Total income
1895	Rs 21,19,441					
1896	1,30,67,048	1,01,038	77,998	0.39	10,942	97,240
1897	1,99,06,412	16,79,122	7,51,978	3.49		7,81,918
1898	2,23,62,921	16,11,010	7,73,255	3.41	17,318	7,90,603
1899	2,26,18,282	16,36,289	7,98,360	3.48	3,562	7,92,922
1900	2,21,57,163	11,96,938	11,96,240	5.31		11,98,210
1901	2,25,70,734	19,41,541	9,31,940	4.09		9,31,940
1902	2,27,93,660	21,19,158	10,86,396	4.14		10,86,396
1903	2,28,27,906	18,18,772	5,74			13,18,772
1904	2,29,43,451	16,40,372	17,47,379	7.59		17,47,379
1905	2,30,18,696					

TABLE II

	Earnings per mile per week	Proportion of expenses to earnings	REMARKS
	53	52 00	
	74	52 00	
	73	52 00	
	74	52 00	
	113	52 00	
	88	52 00	
	98	52 00	
	124	52 00	
	165	52 00	

9 (f) Southern Punjab "Ludhiana" extension (5' 6" gauge)—

Details of construction—

The open mileage, from Ludhiana to Ferozepore, is 77 05 miles. It was sanctioned in 1903 and opened in 1905. Besides the above there were 77 45 miles under construction at the close of the year.

Permanent-way—The permanent-way consists of 75 lb flat footed steel rails on Australian jarrah wood sleepers.

Ballast—The line is being ballasted chiefly with brick.

Fencing—Only the station yards, and short lengths on either side of all level crossings where gates and gate lodges have been provided, are being fenced.

Curves—The sharpest curve is of 1,910 feet radius.

Gradients—The ruling gradient is 1 in 400.

Terms of contract—

This railway is worked as a part of the Southern Punjab railway under the contracts and conditions relating to that railway [9 (e)], except as follows—

Government aid—Government allow the Company, by way of rebate, on the net earnings of the North Western (State) railway from traffic interchanged or sent over any part of the Company's lines including the Ludhiana extension, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the net earnings of the Company in respect of the Ludhiana extension will make up interest at the rate of 5 per cent per annum on the capital expenditure of the Company in respect of the extension as charged in the capital account.

Currency of contract—Concurrent with the contract contained in the Principal Indenture. If determined by notice of purchase on 31st December 1928 or at the expiration of any subsequent period of ten years there shall be paid to the Company a sum equal to twenty five years' purchase of the average of the Company's share of the net earnings of the extension during the five years immediately preceding such 31st December, subject to a maximum limit of 20 per cent of the total capital expenditure on the extension and a minimum of the total sterling capital expenditure of the extension. If determined by notice of purchase on 31st December 1948 then the total amount of such capital expenditure as aforesaid in sterling.

Terms of working—Surplus profits in excess of 5 per cent per annum on the total capital expenditure are divisible at the close of each year between the Company and the Secretary of State in the proportion of one-fourth to the former and three-fourths to the latter.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of the year	Gross earnings	Net earnings	Per cent on capital outlay	Rebate from North Western (State) railway	Total income
1905	Rs 70,09,669	Rs 73,832	Rs 35,00	0.50	Rs 10,500	Rs 45,700

TABLE II

	Earnings per mile per week	Proportion of expenses to earnings
	68	52 00

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 108]

Number Main head 9
Sub heads (a) to (l) **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd***

9 (g) Khushalgarh-Kohat-Thal railway (2' 6" gauge)—**Details of construction—**

The line is 91 73 miles long Its construction was sanctioned in 1900 and it was opened through in 1903

Permanent-way—The permanent-way between Khushalgarh and Kohat consists of flat-footed steel rails, 35 lbs to the yard, laid on wooden sleepers, the Kohat Thal section is laid partly with 25-lb and partly with 21-lb rails, partly on wooden and partly on steel sleepers

Ballast—The line is ballasted throughout with broken stone

Fencing—The line is unfenced

Curves—The sharpest curve is of 239 feet radius

Gradients—The ruling gradient between Khushalgarh and Kohat is 1 m 88 3 and between Kohat and Thal 1 m 100

Terms of contracts—The line is owned and worked by the State

Statistics of working—

TABLE I

TABLE II

	Calendar year	Earnings per mile per week	Proportion of expenses to earnings
Included with the North Western (State) railway	{ 1902	31	67 88
	1903	34	174 56
	1904	34	222 38
	1905	38	166 36

9 (h) Nowshera-Durgai railway (2' 6" gauge)—**Details of construction—**

This railway is 40 25 miles in length Its construction was sanctioned in 1899 and it was opened through in 1901

Permanent-way—The permanent-way consists of 35 lb flat footed steel rails laid partly on wooden and partly on steel sleepers

Ballast—The line is ballasted throughout with broken stone

Fencing—The line is unfenced

Curves—The sharpest curve has a radius of 477 feet

Gradients—The ruling gradient is 1 in 100

Terms of contracts—The railway is owned and worked by the State

Statistics of working—

TABLE I

TABLE II

	Calendar year	Earnings per mile per week	Proportion of expenses to earnings
Included with the North Western (State) railway	{ 1902	51	152 27
	1903	53	101 67
	1904	69	97 29
	1905	63	109 17

9. (i) Dandot Light railway (2' 0" gauge)—

The Dandot Light railway has been constructed by the North Western (State) railway to develop the Dandot colliery which is worked primarily for the benefit of the railway The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked with steel wire ropes by combined gravity and steam power On the second portion (1 29 miles) there is another incline worked by gravity alone

Details of construction—

The line is 6 18 miles long The section from Dandot station to the mouth of the main mine was opened in 1889

Permanent-way—The permanent way consists of old metre gauge 36-lb and 40-lb rails laid on deodar sleepers

Ballast—The line is ballasted throughout with broken stone

Fencing—The line is unfenced

Curves—One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself

Terms of contracts—The line is owned and worked by the State

Statistics of working—Included with the North Western (State) railway

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 9
Sub heads (a) to (i) NORTH WESTERN (STATE) RAILWAY SYSTEM—*concl'd*

9 (i) Amritsar-Patti railway (5' 6" gauge)—

Details of construction—

This line, from Amritsar *via* Tarn Taran to Patti, will be 26 85 miles long. It was sanctioned in 1905 and is under construction.

9 (i) Jullundur-Kapurthalla-Sultanpur (British section)—

This line, which will be 6 80 miles long, has not yet been commenced, nor has the gauge been settled.

9 (i) Jullundur-Kapurthalla-Sultanpur (Native State section)—

The Native state section will be 22 02 miles long. The same remarks apply to it as are made against the British section.

Number Main head 10
Sub heads (a) to (c) OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—

Lines comprising the system.—The Oudh and Rohilkhand (State) railway system is made up of—

	Open line	Under construction or sanctioned for construction	Total
(a) Oudh and Rohilkhand (State) railway { (5' 6" gauge) { (3' 3½" gauge)}	Miles 1,163 2½ 1 81	Miles 57 50	Miles 1,220 7½ 1 81
(b) Hardwar Dehra railway (5' 6" gauge)	2 04		22 04
(c) Cawnpore Burhwal link (3' 3½" gauge)	79 60		79 60
	Total 1,270 09	57 50	1,327 59

Running powers—

Home line over Foreign line—

Ghaziabad to Delhi, Last Indian railway, granted for passenger and goods trains but exorcised for the former only.

Foreign lines over Home line—

Great Indian Peninsula railway at Cawnpore { Cawnpore to Lucknow } granted for passenger and goods trains, but exorcised for the former only { 0 86
 " " " " " Cawnpore to Lucknow } { 44 63
 East Indian railway, Moghal Sarai to Benares Cantonment, for certain passenger trains only . 10 00

55 49

Bengal and North Western railway, Cawnpore to Aligarh 55 03 miles, and Dalganj to Burhwal, }
 55 57 miles (Cawnpore-Burhwal link 3 3½" gauge) } for passenger and goods { 79 60
 " " " " Bonars Cantonment to Benares City (Oudh and Rohilkhand) }
 (State) railway, 3 3½" gauge } 1 81
 81 41

10 (a) Oudh and Rohilkhand (State) railway proper (5' 6" gauge)—

The Oudh and Rohilkhand railway was acquired by the State from the late guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs Clegg and Company connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand (State) railway. This tramway is 3 25 miles long and is worked by manual power. It is used for goods traffic only.

Details of construction—

The total open mileage of the railway is 1,165 05 miles. This may be divided into (1) Main line (Moghal Sarai to Sabaranpur), 518 49 miles, (2) Benares-Lucknow loop, 199 03 miles, (3) Bareilly-Moradabad loop, 70 50 miles, and branches, 375 22 miles, and 1 81 miles of 3' 3½" gauge at Benares.

First sanction to construction was given in 1861. The main line *via* Rai Bareilly was opened through in 1868. The Benares-Lucknow loop was opened through in 1871, and the Bareilly-Moradabad loop in 1873.

There are 57 50 miles under construction.

Permanent-way—The main line and Benares-Lucknow loop are laid throughout with 75-lb flat-footed steel rails. So are most of the branches, although some 60-lb flat-footed steel rails are still to be found in a few of the branches, e.g., the Allahabad branch and in a portion of the Bareilly-Moradabad loop. There are also a few miles of 60-lb flat footed iron rails in the Bahramghat and Madhoganj branches.

The sleepers are of the following types—stamped steel bowls, cast-iron pots, steel trough transverse and wood (sal, deodar, jurrub and New South Wales hard wood). There are a few wrought iron saddle brick sleepers in the Kotdwara branch and Bareilly-Moradabad loop.

Ballast—The main line is ballasted throughout with kunkur, stone, or shingle.

The branches are ballasted either with sand or earth with a covering of broken brick, kunkur or stone, except the Allahabad, Delhi and Cawnpore branches which are ballasted with kunkur, stone or shingle.

Fencing—The line is fenced throughout with the exception of the Madhoganj, Meerut and Kotdwara branches.

Curves—The sharpest curve on the line is of 1,000 feet radius.

Gradients—The ruling gradient of the whole of the railway is 1 in 100.

Terms of contract—

The Oudh and Rohilkhand (State) railway is owned and worked by the State.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number ^{Main head 10}
 Sub-heads (a) to (c) OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—*contd*

10 (a) Oudh and Rohilkhand (State) railway proper (5' 6" gauge)—*concl'd*

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year		Gross earnings	Net earnings	Per cent on capital outlay	Interest	Surplus profits paid to Company	Gain or loss to the State	TABLE II		
	Rs	Rs							Rs	Rs	Proportion of expenses to earnings
1879	5,80,35,774	43,44,843	18,19,936	3 14	28,00,000		-9,80,064	1867	74	106 97	
1880	6,02,24,081	44,55,150	19,04,400	3 16	28,19,916		-9,15,537	1868	120	61 54	
1881	6,25,30,935	49,23,730	19,75,609	3 16	29,14,137		-9,38,433	1869	97	81 74	
1882	6,52,79,840	52,62,844	18,01,371	2 76	30,67,622		-12,66,201	1870	112	227 93	
1883	7,07,69,446	51,56,255	21,60,362	3 50	31,35,495		-6,55,193	1871	117	69 31	
1884	7,91,43,953	52,73,198	23,26,146	2 94	41,14,587		-17,88,441	1872	56	68 58	
1885	8,51,34,426	55,37,369	17,95,361	2 10	46,53,333		-28,57,972	1873	56	72 91	
1886	8,95,12,775	65,05,408	28,60,755	3 20	51,88,014		-28,27,250	1874	72	61 41	
1887	9,17,06,668	66,46,213	31,35,249	3 42	58,98,339		-22,63,690	1875	97	59 71	
1888	9,18,41,649	70,77,053	30,16,005	3 28	51,67,494		-21,51,489	1876	120	63 93	
1889	9,22,32,226	75,39,638	42,04,076	4 56	49,71,698		-7,67,822	1877	153	52 83	
1890	9,37,89,280	73,81,399	37,54,478	4 05	44,23,109		-6,68,631	1878	153	54 23	
1891	9,28,38,358	83,64,209	49,42,453	5 32	47,25,666		+ 2,16,792	1879	153	58 11	
1892	10,34,95,085	85,42,836	50,16,329	4 84	52,79,411		-2,63,082	1880	157	57 25	
1893	10,09,17,292	87,15,926	50,17,053	4 97	55,01,058		-4,84,005	1881	173	59 91	
1894	10,23,87,184	1,05,16,936	57,36,188	5 58	63,11,123		-5,74,985	1882	185	65 77	
1895	10,65,05,148	1,02,94,880	52,55,948	4 93	63,60,949		-11,14,001	1883	192	54 54	
1896	10,92,69,485	86,97,076	43,50,907	3 93	61,30,729		-17,79,822	1884	176	65 50	
1897	11,44,19,239	85,15,956	36,96,778	3 23	59,77,486		-22,80,708	1885	186	56 02	
1898	11,64,90,213	98,51,599	53,07,727	4 56	58,76,247		-5,65,520	1886	197	57 38	
1899	12,21,81,423	1,11,38,990	60,76,595	4 97	59,75,292		+ 1,01,393	1887	203	41 21	
1900	12,55,94,869	1,15,15,132	55,91,727	4 45	62,28,185		-6,36,458	1888	205	49 14	
1901	12,88,66,865	1,32,54,991	72,20,007	5 60	63,12,044		+ 9,07,963	1889	186	56 59	
1902	13,65,17,057	1,31,67,792	64,11,336	4 70	64,75,905		-64,569	1890	190	46 12	
1903	14,52,62,379	1,39,49,922	72,81,862	4 98	68,00,805		+ 151,557	1891	208	45 45	
1904	14,90,63,929	1,52,96,206	71,93,117	4 76	70,55,610		+ 77,477	1892	203	51 44	
1905	15,37,92,999	1,53,85,913	63,43,667	4 12	71,68,431		-8,24,764	1893	231	45 53	
								1894	230	51 30	
								1895	226	48 16	
								1896	235	53 37	
								1897	238	58 77	

10 (b) Hardwar-Dehra railway (5' 6" gauge)—

Details of construction—

This railway is 32 04 miles long. Its construction was sanctioned in 1896 and it was opened in 1900.

Permanent-way—The permanent-way consists of 75 lb flat-footed I S R steel rails on deodar sleepers.

Ballast—The line is ballasted throughout with shingle, with a covering of broken stone for boxing.

Fencing—The line is fenced throughout.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 75.

Terms of contract—

The Hardwar-Dehra railway is worked under the following contract—

Contract of—26th March 1897 (between the Secretary of State and the Hardwar-Dehra Railway Company) for construction and working.

The general conditions of the contract are as follows—

Government aid—Interest at 3 per cent per annum is guaranteed. Government also allow Rs 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

Terms of contract—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital and, except for bona fide temporary purposes at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

Currency of contract—Government may determine the contract, on twelve months' notice either on the 31st December 1919 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent, or is not less than, the total capital expenditure.

Power of Company to surrender contract—Nil.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number ^{Main head 10}
 Sub heads (a) to (c) OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—*concl.*

10 (b) Hardwar-Dehra railway (5' 6" gauge)—*concl.*Terms of contract—*concl.*

Terms of working—After deduction of 50 per cent of the gross earnings for working expenses (which may include any single item of capital expenditure, not exceeding Rs 1,000, classed as 'Minor Work', subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company

Rates and fares—Rates and fares to be arranged between Government and the working agency within one-and-a-half times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand (State) railway

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Company's share of net earnings	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings	REMARKS
1897	Rs 1,96,617									
1898	10,70,315									
1899	29,42,687									
1900	26,67,093	1,60,485	80,243	3 13	Rs 84,920					
1901	28,12,301	2,13,456	1,06,728	3 80	85,048	11,253	+22,508	115	50 00	
1902	28,36,486	2,52,485	1,26,242	4 45	85,260		+29,911	128	50 00	
1903	28,44,512	2,62,719	1,31,359	4 62	85,597		+25,502	152	50 00	
1904	29,12,992	2,63,612	1,31,806	4 52	86,777	23,050	+21,979	158	50 00	
1905	29,20,650	3,13,476	1,56,732	5 37	8,590	22,515	+46,633	188	50 00	
										Interest up to 1900 was charged to capital and not earnings of 1900 were credited to capital in reduction of interest charges

10 (c) Cawnpore-Burhwal (3' 3½" gauge) link—

The construction of the Cawnpore-Burhwal (3' 3½" gauge) link was sanctioned as a part of the project for linking up the 3' 3½" gauge systems of Northern India

Details of construction—

The link is 79 60 miles long. Its construction was sanctioned in 1891 and it was opened through in 1897

Permanent-way—Where the line is not mixed gauge it is laid with new 50-lb steel rails

Ballast—The line is ballasted throughout with kunkur, stone, or shingle

Fencing—The line is fenced throughout

Crosses—The sharpest curve has a radius of 573 feet

Gradients—The ruling gradient is 1 in 400

Terms of contract—

The line is owned by the State. The Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rohilkhand (State) railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand (State) railway 80 per cent of the gross receipts arising therefrom

Statistics of working—

Included with the Oudh and Rohilkhand (State) railway (5' 6" gauge)

Number ^{Main head 11}
 Sub heads (a) & (b) ASSAM-BENGAL RAILWAY SYSTEM—

Lines comprising the system—The Assam-Bengal railway system is made up of—

Open line	Under construction or sanctioned for construction		Total
	Miles	Miles	
(a) Assam Bengal railway (3' 3½" gauge)			
(b) Noakhali (Bengal) railway (3' 3½" gauge)			
	740 38	19 00	759 38
	3 90		3 90
Total	775 28	19 00	794 28

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State

11 (a) Assam-Bengal railway proper (3' 3½" gauge)—

Details of construction—

The total open mileage of the line is 740 38 miles, which may be divided into (1) main line (Chittagong to Tinsukia), 576 61 miles, and (2) branches, 163 77 miles. The main line was opened through to Tinsukia in 1903

Besides the above 19 miles were sanctioned for construction in 1905

Permanent-way—The line is laid with 50-lb flat footed steel rails, partly on sal and pyinkado, and partly on bastard sal, nageshur and jarrah wood, sleepers.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 11 Sub heads (a) and (b) ASSAM-BENGAL RAILWAY SYSTEM—*contd*11 (a) Assam Bengal railway proper (3' 3½" gauge)—*concl.*Details of construction—*concl'd**Ballast*—The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted.*Fencing*—The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghat and Gauhati, and half a mile from Gauhati towards Lumding, and at some stations on the hill section.*Curves*—The sharpest curve is of 35' foot radius.*Gradients*—The ruling gradient between Chittagong and Badarpur is 1 in 150, between Badarpur and Lumding 1 in 60, with a 1 in 37 banking section 8 ½ miles long, between Gauhati and Tinsukia, 1 in 100, between Laksam and Chandpur, 1 in 300, between Badarpur and Silchar, 1 in 150.

Terms of contract—

The Assam Bengal railway is worked under the following contract—

Contract of—26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

The general conditions of the contract are—

Government aid—Government guarantee interest in sterling at 3 per cent on the Company's share capital of £1,500,000. Up to 30th June 1898 interest was allowed at 3½ per cent. Land was provided free of charge.*Terms of contract*—The contract provides that the Company raises £1,500,000, and that any further money required be supplied either by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereon, and generally all property, whether real or personal, (with the exception of monies paid against interest on the Company's share capital and sums applied from net earnings) are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.*Currency of contract*—Government may determine the contract, by giving the Company in England 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line is worked at a loss for not less than three half years consecutively. On the determination of the contract the Company is to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.*Power of Company to surrender contract*—Nil.*Terms of working*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year, and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

(1) Contribution due to the Provident Fund, calculated at one per cent of net earnings.

(2) The equivalent in rupees of interest paid on debenture capital, provided that if the Company's share capital is not less than ⅓ of the total capital expenditure, the rate of interest recovered under this sub head (on debentures issued previous to the 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital.

(3) The equivalent in rupees of guaranteed interest paid to the Company in respect of share capital, interest on the capital contributed or deemed to be contributed by Government, at the same rate is the guarantee for the time being on the Company's capital. But if the Government capital exceeds ⅓ of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement, and the residue is divisible between Government and the Company in the ratio of their respective capital expenditure.

Rates and fares—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year		Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs							
1891	1,53,203					5,893	—5,893		
1892	30,16,133					2,66,378	—2,66,378		
1893	1,07,63,192					7,09,987	—7,09,987		
1894	2,46,89,698					8,76,954	—8,76,954		
1895	4,01,38,298	2,14,426	—8,047			13,95,636	—14,03,683	64	183.75
1896	5,21,89,804	6,18,785	33,238	0.06	23,73,034	—23,39,796	71	94.63	
1897	6,37,67,471	9,90,640	72,214	0.11	22,56,279	—21,81,065	68	92.71	
1898	7,56,41,721	13,05,121	54,551	0.07	24,45,275	—23,90,724	86	95.83	
1899	8,69,56,236	16,19,616	3,22,704	0.37	28,63,054	—25,40,380	75	80.08	
1900	9,56,01,772	17,09,955	3,64,364	0.38	33,31,390	—29,67,026	75	78.69	
1901	10,41,49,467	21,34,252	4,56,64	0.44	35,06,252	—30,49,598	70	78.60	
1902	11,11,34,922	20,96,058	2,54,418	0.23	38,08,857	—35,53,969	68	87.86	
1903	12,40,28,548	23,97,638	4,43,963	0.36	40,71,450	—36,27,487	72	80.51	
1904	12,60,09,639	29,53,962	1,05,390	0.08	41,66,555	—40,61,145	77	94.78	
1905	12,78,57,542	34,11,295	1,25,615	0.10	42,61,306	—41,35,691	83	94.63	

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 11
Sub heads (a) and (b) ASSAM-BENGAL RAILWAY SYSTEM—*concl.*

11 (b) Noakhali (Bengal) railway (3' 6" gauge)—

Details of construction—

This line, which connects Laksam with Sibeb Ghatta, is 31.90 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Permanent-way—The line is laid with 41½-lb steel rails on 4½" sleepers. A few jattha wood sleepers are also in use.

Ballast—The line is not ballasted.

Fencing—The line is unfenced.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 200.

Terms of contracts—

The Noakhali (Bengal) railway is worked under the following contracts—

Contract of—27th March 1901 [between the Secretary of State and the Noakhali (Bengal) Railway Company] for construction of the line.

27th March 1901 [between the Assam-Bengal Railway Company, and the Noakhali (Bengal) Railway Company] for working the line.

The general conditions of the contracts are as follows—

Government aid—If the net earnings in any half-year are less than Rs 30,000, Government allow as rebate a sum not exceeding one-half of the gross earnings of such half-year of the Assam-Bengal railway from the interchanged traffic (except stores) as will, together with the net earnings of the Company, make up an amount equal to Rs 30,000. Land has been provided free of charge.

Terms of contract—The Company's share of stock capital is limited to £130,000, which cannot be increased without the sanction of the Secretary of State and of the working agency, but the Company can raise money at a reasonable rate of interest for bona fide temporary purposes.

Currency of contract—The Secretary of State may, by giving notice and by paying to the Company in India the value of the railway, works, plant, machinery and stores, determine the contract, if the Company fails to comply with its obligations under the contract. The Secretary of State may, by giving twelve months' notice, determine the contract, either on the 31st December 1922 or on the 31st December in the last year of any subsequent period of ten years, on paying to the Company in India, within four calendar months from the time at which the contract should be determined, a sum equal to twenty-five times the average yearly net earnings during the three years immediately preceding, provided that the amount so payable shall not exceed by more than 20 per cent the balance on the Capital Account of the Company or be less than such balance.

Terms of working—The gross earnings are to be applied in payment—

(1) To the credit of the Provident Institution of the Assam Bengal railway of a sum equal to one-half of 1 per cent of the total gross earnings,

(2) Of Rs 25 per mile open per week of the new railway maintainable by the Company and of Rs 35 per mile open per week of the new railway not maintainable by the Company, which includes any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 15 per mile of line open in each half year, and

(3) Of all moneys paid or payable to the Secretary of State for the supervision of such mileage during such half-year the residue to be paid over to the Company as the net earnings of the railway.

Rates and fares—The rates and fares to be fixed from time to time by the Secretary of State after consultation with the working agency, within the maxima and minima for the time being in force on the Assam-Bengal railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Rebate from Assam Bengal railway	Total income	Per cent of total income on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1903	Rs 21,04,837	Rs 30,099	Rs 2,409	0.11	Rs 27,389	Rs 25,708	1.23	Rs 30	92.00
1904	21,59,851	55,840	—3,232		50,775	47,543	2.20	Rs 31	105.73
1905	21,35,528	68,493	1,666	0.08	56,055	57,721	2.71	Rs 38	97.57

APPENDIX 38—contd*History of railways constructed and in progress*

[For Index see page 106]

**Number Main head 12
Sub heads (a) & (b) BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—**

Lines comprising the system —The Bengal and North-Western railway system is made up of—

	Open line	Under construction or sanctioned for construction		Total
		Miles	Miles	
(a) Bengal and North Western railway (3' 3½" gauge)	901 32	117 77		1,019 09
(b) Tirhoot railway (3' 3½" gauge)	565 45	212 17		777 62
	Total	1,466 77	329 94	1,796 71

Running powers—*Home line over Foreign lines—*

Cawnpore	—	—	—	Miles
Aishbagh t	—	—	—	45 03
Daliganj C	—	—	—	3 40
Benares C	—	—	—	34 57
	—	—	—	1 81
	Total			84 81

12 (a) Bengal and North-Western railway proper (3' 3½" gauge)—**Details of construction—**

The total open mileage of the railway is 901 32 miles

This may be divided into (1) main line (Sonepore to Ajodhya) 237 10 miles, (2) loop line (Sonepore to Bunderchak) 9 84 miles, and (3) branches, 654 88 miles. The construction of the main line was sanctioned in 1882 and it was opened through in 1885.

Besides the above there are 117 77 miles under construction

Permanent-way—The main line between Sonepore and Burhwal is laid with 50-lb steel rails on sal sleepers. The rest of the line north of the Gogia is laid with 41½-lb steel rails mostly on sal sleepers. The Ganges-Gogra Doab lines, with the exception of the Aunrihi-Pephna branch which is laid with 50 lb steel rails, is laid with 41½-lb steel rails on sal sleepers, and are being relaid with 50-lb steel rails.

Ballast—The whole line, except quite new constructions, is ballasted with lunkur or broken brick.

Fencing—The main line is fenced.

Curves—The sharpest curve is of 900 feet radius.

Gradients—The ruling gradient is 1 in 300. On the various ghat lines the gradients are steeper.

Terms of contracts—

The Bengal and North-Western and Tirhoot railways are worked under the following contracts—

Contracts of—12th December 1882—Bengal and North-Western Railway Company's principal contract

22nd February 1886—Contract modifying that of 1882.

19th December 1894—Contract supplemental to those of 1882 and 1886, providing for the Revelganj, Bahramghat, Burhwal, Tulsipuri, Katuman Ghat and Turtipuri branches of the Company's railway and for the exercise of running powers over the Cawnpore-Burhwal (3' 3½" gauge) link.

23rd July 1896—Contract supplemental to those of 1882, 1886 and 1894, providing for the Ganges-Gogra Doab lines of the Company's railway, known as the Ganges-Gogra Doab contract.

15th January 1903—Supplemental contract for the Ghazipur Ballia, Azamgarh Shahganj and Aunri-Jaunpur lines.

24th April 1903—Supplemental contract regarding rate of exchange.

14th December 1905—Contract, supplemental to that of 1882, regarding the date on which the Secretary of State may exercise his right to purchase the Company's line and the period at which he may fix the purchase price, and revising the terms on which the Tirhoot railway will continue to be worked by the Bengal and North-Western Railway Company after the expiration, on the 31st December 1901, of the contract of 1890.

The general conditions of the contracts are as follows—

Government aid—Land alone was provided free of charge.

Currency of contracts—(1) *Bengal and North-Western railway contracts*—The contracts of 1882, 1886 and 1894, viz., those for the working of the Bengal and North-Western railway proper, terminate by effluxion of time on the 31st December 1981, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling stock, movable machinery, stores, etc. Government may, however, determine the contract on the 31st December 1912 or on the 31st December 1932, on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent to which Government would have been entitled under the contract of 12th December 1882) for the five years preceding the purchase. Government may also determine the contract at any time, on six months' notice, if the Company fails to observe its obligations, on paying the value of rolling stock, stores, etc., and fair value of line and fixed machinery and plant, less value of latter treated as a reversionary sum absolutely payable on the 31st December 1981.

(2) *Ganges Gogra Doab contract*—The contract of 1896, viz., that covering the Ganges-Gogra Doab lines, runs concurrently with those of 1882, 1886 and 1894, as does also the supplemental contract of 1903, but, in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line, as shown in sterling, appearing in the capital account.

Note—Government have relinquished their right to acquire the Company's line on the 31st December 1912, on the condition that they shall have the power to fix in 1912 the purchase price of the Bengal and North-Western railway and to purchase the line at that price on the 31st December 1932.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 12
Sub heads (a) & (b) BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd*

12 (a) Bengal and North-Western railway proper (3' 3½" gauge)—*contd*Terms of contracts—*contd*

(3) *Tirhoot railway contract*—The contract of 1890, *viz.*, that for working the Tirhoot railway, terminated on the 31st December 1904, and the revised contract under which the railway will continue to be worked by the Company came into force on and from the 1st January 1905 and terminates on the 31st December 1932, subject to the proviso that the Secretary of State may, if he should think it desirable, terminate it in 1919 or modify it at that date in such manner as he may think fit.

Power of Company to surrender contracts—Nil

Terms of working—The gross earnings of the State and Company's sections to be kept entirely separate

All charges for maintenance of way, works and stations, other than those for general supervision, to be allocated to each section on the basis of actual outlay on that section, all other working expenses being divided between the two sections in proportion to the gross earnings of each.

4 per cent on respective outlay on "rolling stock," "steamers, barges and landing stages," "stores," "station, station machinery and staff quarters at Sonepur" for "joint use," and future expenditure on "workshops," shall be charged to working expenses in addition to ordinary working expenses and contribution to Provident Fund, for apportionment to the State and Company's sections, in the ratio of their respective gross earnings. This amount of interest to be credited to the respective Revenue Accounts in the ratio of contributions of capital to the joint accounts.

Government to first receive out of Tirhoot railway net earnings of each year 5 per cent. on all capital expended on the Tirhoot line open for traffic, including expenditure subsequent to 31st December 1904.

The residue of net earnings to be dealt with as follows—

(a) if the residue does not exceed ten lakhs, $\frac{1}{6}$ th to Government and $\frac{5}{6}$ th to the Company,

(b) if the residue exceeds 10 lakhs, the sum of 10 lakhs shall be divided as in condition (a) and the excess over 10 lakhs shall belong $\frac{1}{12}$ th to Government and $\frac{11}{12}$ th to the Company.

Rates and fares—On the Company's section the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section certain maxima and minima have been fixed, within which the Company is permitted to vary rates.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Payments received for working the Tirhoot Railway	Total income	Percentage on capital outlay	TABLE II Including the Tirhoot railway from 1890	
							Rs	Proportion of expenses to earnings
1884	Rs 1,52,47,428	77,670	Information not available	Rs —26,321	23	133.76		
1885	2,01,86,930	12,05,320		6,10,709	72	49.82		
1886	2,36,16,102	18,51,074		8,00,189	343	56.86		
1887	2,56,2,681	19,44,002		8,87,001	90	56.94		
1888	2,61,51,593	22,09,553		9,88,841	102	55.25		
1889	2,63,41,672	22,11,824	Information not available	10,53,964	400	52.35		
1890	2,57,94,904	22,18,615		12,32,397	486	44.08		
1891	2,76,68,842	24,76,904	15,54,509	69,494	121	40.04		
1892	2,83,88,821	29,39,077	16,84,194	67,060	17,01,254	120	41.12	
1893	2,94,84,234	26,14,516	15,81,860	66,842	16,48,702	123	43.20	
1894	2,87,24,687	26,17,242	16,95,265	72,858	17,67,623	130	41.79	
1895	3,12,95,701	25,71,036	16,89,766	72,909	17,55,675	133	42.45	
1896	3,49,36,114	26,26,033	16,70,172	71,614	17,41,786	134	43.97	
1897	4,10,32,207	27,55,718	17,24,277	74,905	17,99,182	128	43.76	
1898	4,66,78,522	33,31,890	19,74,920	75,885	20,50,805	129	43.37	
1899	5,16,06,783	47,44,861	26,70,911	61,940	27,39,851	131	46.67	
1900	5,24,73,019	44,56,593	24,79,433	49,563	25,28,996	128	49.56	
1901	5,50,91,530	53,66,794	30,97,372	76,853	31,74,225	140	44.51	
1902	5,84,82,525	55,60,238	29,72,183	76,671	30,40,854	154	46.82	
1903	6,21,09,547	61,98,433	38,53,972	1,04,369	39,58,341	161	40.61	
1904	6,43,92,183	67,16,933	43,28,496	1,16,831	44,45,930	168	39.68	
1905	6,77,55,566	61,79,116	34,72,017	1,69,446	36,41,463	151	43.11	

12 (b) Tirhoot railway (3' 3½" gauge)—

Details of construction—

The open mileage of this railway is 565.45 miles, consisting of (1) main line (Semaria Ghat to Bettiah and Samastipur to Khanwa Ghat), 242.58 miles, and (2) branches, 322.87 miles. First sanction to the construction of the main line was accorded in 1874 and it was opened throughout in 1890. Besides the above there are 212.17 miles under construction.

Permanent-way—The following types of rails are in use—50 lb flat-footed steel, 41½ lb flat-footed steel and 60-lb iron. The sleepers are of sal, pyinkado, and cast iron of Denham-Olpehets' pattern.

Ballast—The line (except quite new constructions) is ballasted with lunkur or broken brick.

Fencing—The main line is fenced with stone posts and 4 wires.

Curves—The sharpest curve, which is on the main line, is of 1,500 feet radius.

APPENDIX 38—*contd*

History of railways constructed and in progress

[For Index see page 106]

Number Main head 12
Sub heads (a) & (b) BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—concl'd

12 (b) Tirthot railway (3' 3 $\frac{1}{2}$ " gauge)—concl'd

Details of construction—concl'd

Gradients—The ruling gradient is 1 in 300, except between Samastipur and Khanwa Ghat on which 3 42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper.

Terms of contracts—See under Bengal and North-Western railway proper, 12 (a)

Statistics of working—

TABLE I

Saganli Bayaul branch, before it was purchased by the State.

Table I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Farnings per mile per week	Proportion of expenses to earnings
1896	Rs. 126,044	Rs.	Rs.		Rs.	
1897	6,687.3					
1898	8,075.0					
1899	10,817.10	5,433	} Credited to interest on capital		30	40 00
1900	12,12,073	25,830			50	53 62
1901	10,67,014	37,182	13,593	1.27	40	63 44
1902	11,73,421	39,296	18,638	1.74	42	52 57
1903	11,16,253	4,809	18,571	1.66	51	57 61
1904 (up to 10th April)	11,16,562	18,710	10,114	0.91	74	46 03

Number Main head 18 Sub-heads (a) & (b) **BENGAL DOOARS RAILWAY SYSTEM—**

Lines comprising the system—The Bengal Dooars railway system is made up of—

Open line
Miles
36 40
116 56
<hr/>
152 96

(a) Bengal Dooars railway (3' 6 $\frac{1}{2}$ " gauge)
 (b) Bengal Dooars railway extensions (3' 6 $\frac{1}{2}$ " gauge)

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 108]

Number Main head¹³
Sub heads (a) and (b) BENGAL DOOARS RAILWAY SYSTEM—*contd*

13 (a) Bengal Dooars railway proper (3' 3½" gauge)—

Details of construction—

The total length of open mileage is 36 40 miles, divided into main line (Bist Bink Teesta to Dam, Diri), 31 miles and branch, 5 40 miles. Construction was sanctioned in 1891 and the line was opened through in 1893.

Permanent-way—The line has been laid with 41½-lb flat-sooted steel rails on sal sleepers.

Ballast—The line is ballasted throughout with stone.

Fencing—The line is unfenced.

Curves—The sharpest curve is of 1,432 50 feet radius.

Gradients—The ruling gradient is 1 in 100.

Terms of contracts—

The Bengal Dooars railway and the extensions are worked under the following contracts—

Contracts of—27th April 1891—Bengal Dooars railway principal contract

2nd March 1898—Contract supplemental to that of 1891 (for extensions)

27th September 1900—Supplemental to that of 1898 (extending period of completion of Diri-Bagratole extension)

7th November 1901—Supplemental to those of 1898 and 1900 (extending period for completion of Mal-M. Darri Hat extension)

The general conditions of the contracts are as follows—

Government aid—Land fees of cost from Government, and, from the District Board of Jalpaiguri, an annual subsidy of such amount not exceeding Rs 4,000 per annum is to be required to make up the net profits of the undertaking to five per cent per annum on the capital outlay.

Currency of contracts—On the 31st December 1919, and thereafter at intervals of seven years, Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company in the case of the Bengal Dooars railway of one and two-fifths of the invested capital and capital liabilities, and in the case of the extensions of a sum equal to 25 times the average net earnings during the last preceding five years, but not exceeding by more than 20 per cent the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If, at any period, the Bengal Dooars railway or the extensions should not be worked for six consecutive months, the Company can also be called upon to surrender the line and extensions on receipt of the actual sum expended up to the date of notice.

Terms of working—If worked by the Company the whole of the profits go to the Company. If worked by the Eastern Bengal (State) railway the Secretary of State retains each half-year 10 per cent of the gross earnings, the remaining 60 per cent being paid to the Company after deduction of income-tax payable to Government.

Rates and fares—

Bengal Dooars railway and extensions from Mal to Madaribat and Darri Diri to Bagratole—

Certain maxima and minima have been fixed subject to alteration from time to time. If the gross receipts reach 12 per cent on capital, Government may reduce maxima to the extent of 25 per cent, except certain special rates.

Extension from Barnes Junction to Jalmanirhat—

Certain maxima and minima have been fixed within which charges can be made.

Statistics of working—

TABLE I

Calendaryear	Capitaloutlayto end of each year	Grossearnings	Netearnings	Percentage on capital outlay	Subsidy from District Board	Total income	Percentage of total income on capital outlay	Hours per mile per week	Proportion of expenses to earnings
1891	Rs 16,470	Rs —	R —	—	Rs —	Rs —	—	Rs —	—
1892	12,67,626	—	—	—	—	—	—	—	—
1893	18,49,691	1,11,912	57,639	712	—	57,639	712	69	10.80
1894	22,81,224	2,93,286	1,01,271	17	1,000	1,41,701	612	104	40.26
1895	23,26,476	3,55,537	1,27,438	548	1,000	1,31,458	565	125	49.71
1896	24,93,213	2,70,450	1,31,813	542	—	1,31,813	542	176	61.26
1897	24,50,713	2,86,107	1,45,289	548	—	1,45,289	548	115	39.22
1898	26,68,050	3,49,080	1,10,620	415	4,000	1,14,620	430	135	57.40
1899	26,26,718	3,73,037	1,18,116	451	—	1,18,116	451	177	55.41
1900	26,49,695	3,32,730	1,89,161	717	—	1,89,161	717	168	43.06
1901	26,44,873	3,10,920	1,76,899	667	—	1,76,899	667	156	43.27
1902	26,50,697	2,71,310	1,71,155	617	—	1,71,155	617	141	37.97
1903	26,95,547	2,99,967	2,23,786	830	—	2,23,786	830	156	27.80
1904	26,64,613	3,35,277	2,56,651	963	—	2,56,651	963	175	25.85
	27,26,891	3,70,443	2,49,598	915	—	2,49,598	915	196	32.60

APPENDIX 38—*contd**History of railway constructed and in progress*

[For Index see page 106]

Number ^{Main head 13}
_{Sub heads (a) and (b)} BENGAL DOOARS RAILWAY SYSTEM—*contd*

13 (b) Bengal Dooars railway extensions (3' 3½" gauge)—

Details of construction—

The total open mileage of the extensions is 116 56 miles, comprised of (1) Eastern extension (Mal to Madirhat), 44 miles, (2) Southern extension (Barnes junction to Lalmanirhat), 65 80 miles, and (3) Western extension (Dam Dim to Bigrakote), 6 76 miles. The construction of the extensions was sanctioned in 1898 and they were opened in 1903, 1900 and 1902, respectively.

Permanent-way—The line has been laid with 41½-lb flat-footed steel rails on sal sleepers

Ballast—The line is ballasted throughout with stone

Fencing—The line is unfenced

Curves—The sharpest curves is of 955 feet radius

Gradients—The ruling gradient of the Southern extension is 1 in 200 and that of the Eastern and Western extensions, 1 in 100.

Terms of contracts.—See under Bengal-Dooars railway proper, 13 (a)

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1897	Rs 72,151	Rs	Rs		Rs	
1898	4,03,611					" 72 31
1899	26,75,45					69 92
1900	47,11,632	16,191	5,015	0 11	13	
1901	62,26,667	1,76,399	68,937	1 11	47	
1902	72 66 166	2,53 634	86,266	1 19	62	65 99
1903	79,30,172	3 47 832	1,05,916	1 34	71	69 55
1904	84,97,571	4 15,179	1,08,680	1 28	68	73 85
1905	87,93,080	5 12 443	1,97,824	2 25	85	61 39

Number ^{Main head 14}
_{Sub heads (a) to (d)} BHAVNAGAR-GONDAL JUNAGAD-PORBANDAR RAILWAY SYSTEM—

Lines comprising the system.—The Bhavnagar-Gondal-Junagad-Porbandar railway system is made up of—

Open line Miles
334 19
20 83
51 22
46 21
Total 455 45

- (a) Bhavnagar Gondal Junagad Porbandar railway (3' 3½" gauge)
- (b) Dhrangadra railway (3' 3½" gauge)
- (c) Jamnagar railway (3' 3½" gauge)
- (d) Jetalsar-Rajkot railway (3' 3½" gauge)

14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3' 3½" gauge)—

This line was constructed by Government agency and is owned and worked by the Native States after which it is named

Details of construction—

The line is 331 19 miles long. It consists of the following sections, (1) Bhavnagar to Wadhwan, 105 03 miles, (2) Dholka to Porbandar Bandar, 159 51 miles, and (3) Jetalsar to Verval Bandar, 69 65 miles. The construction of the first two sections was sanctioned in 1879 and they were opened through in 1880 and 1889, respectively. The third section was sanctioned in 1886 and opened through in 1890.

Permanent-way—The permanent-way consists of 41½-lb flat-footed steel rails on creosoted pine and deodai sleepers, except on the Dhoraji-Porbandar section where the rails are laid on steel pea-pod sleepers

Ballast—The line is ballasted with broken stone with the exception of the length between Chuda and Wadhwan which is ballasted with kunkur

Fencing—The line is practically unfenced

Curves—The sharpest curve is of 1,200 feet radius

Gradients—The ruling gradient is 1 in 200, except on the Jetalsar-Verval section where it is 1 in 150

Terms of contracts—

The Bhavnagar-Gondal-Junagad-Porbandar railway system is worked under the following agreements—

Agreements of—1st January 1897—For the management and working of the "Integral railways" as one system by a Board of Control

1st June 1898—Dhrangadra railway—
 6th April 1897—Junagad railway—
 12th April 1893—Jetalsar-Rajkot railway—} For management and working by the Bhavnagar-Gondal-Junagad-Porbandar Railway Administration

The general conditions of the agreements are as follows—

Government aid—Nil

Terms of agreement—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President, and one nominee from each of the proprietary States of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those States are separately and entirely described as the "Integral railways" and their combination is termed the "Open system". The decisions of the Board of Control are based on the majority of votes recorded.

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 14
Sub heads (a) to (d) BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.*

14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3' 3½" gauge)—*concl'd*Terms of contracts—*concl'd*

(“Members’ single votes” and “Proprietary votes”) “Members’ single votes” prevail at special meetings where each member has one vote, while “Proprietary votes,” i.e., votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings

Currency of agreement—The term of the principal agreement for the working of the Bhavnagar-Gondal-Junagad-Porbandar railway proper is from the 1st January 1897 to the 31st December 1900. Until a new agreement has been adopted the terms of this agreement remain in force

Power of Board to determine agreement—By unanimous vote the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary State can terminate the agreement after the 31st December 1900, subject to 12 months’ notice at the beginning of the year.

Terms of working—Bhavnagar-Gondal-Junagad-Porbandar railway—The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the Capital and Revenue expenditure is wholly borne by the same. All expenditure on the open system and on the integral railways as may require apportionment is divisible as prescribed in Appendix A to the agreement. The Bhavnagar State provides funds for working the whole system as well as for ordinary capital on the integral railways, all receipts of the entire open system being paid into the Bhavnagar State Treasury. All funds for major capital works are provided by the integral railway concerned, or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent interest on the paid up value of all property in occupancy for open system purposes, to compensation for losses for works and buildings falling into disuse and to 7½ per cent per annum for any additional accommodation required by the open system

Dhrangadra railway—	{ The Board of Control work the railways at 10 per cent of gross earnings of each railway,
Jamuagar railway—	plus actual expenditure incurred on the maintenance of way, works and stations, and
Jetalsar Rajkot railway—	supply rolling stock at 5 per cent of gross earnings to the Jetalsar-Rajkot and Dhrangadra railways

Rates and fares—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system, but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any integral railway provided that such alteration be not prejudicial to the interests of any other integral railway

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1879	Rs 4,80,177	Rs 6,88,383	Rs 2,81,706	3 11	Rs 78	70 18
1880	19,10,304					
1881	74,46,333	8,76,816	3,51,618	1 09	87	59 55
1882	86,75,711	8,94,179	3,26,513	3 61	89	63 47
1883	90,49,332	10,92,812	4,98,107	5 36	109	54 46
1884	102,92,040	10,04,660	3,91,247	1 07	98	59 55
1885	96,25,031					
1886	98,57,553	9,65,379	4,15,149	1 21	96	57 00
1887	1,08,28,023	9,80,837	4,42,103	4 08	98	54 93
1888	1,10,68,663	11,20,260	5,06,545	3 88	109	50 58
1889	1,62,60,477	13,80,417	7,04,177	4 33	97	56 55
1890	1,68,42,051	15,71,788	6,00,167	3 56	91	61 81
1891	1,71,24,771	14,77,263	4,75,786	2 78	85	67 79
1892	1,72,52,030	15,78,178	4,37,876	2 54	91	72 25
1893	1,72,28,860	20,63,101	8,89,708	5 16	119	56 92
1894	1,73,6,592	18,40,287	7,91,335	4 56	106	49 61
1895	1,76,00,032	19,52,221	8,21,220	4 67	113	57 93
1896	1,75,63,395	19,80,878	9,69,274	5 63	114	50 06
1897	1,76,53,652	19,21,640	8,19,081	4 64	105	55 04
1898	1,78,56,546	16,98,657	7,09,781	3 98	97	58 22
1899	1,79,56,272	18,53,483	9,26,935	5 16	107	49 99
1900	1,80,00,616	19,53,665	10,10,773	5 62	113	48 27
1901	1,80,96,671	15,37,378	6,80,089	3 76	89	55 76
1902	1,80,87,538	13,71,837	5,66,342	3 13	79	58 72
1903	1,81,53,314	16,04,638	8,36,670	4 61	92	47 86
1904	1,80,44,250	18,60,565	10,39,916	5 76	107	44 11
1905	1,80,09,420	18,51,324	9,90,981	5 50	106	46 47

14 (b) Dhrangadra railway (3' 3½" gauge)—

This line was constructed for the Dhrangadra State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 108]

Number Main head 14
Sub heads (a) to (d) BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.*

14 (b) Dhrangadra railway (3' 3 $\frac{1}{2}$ " gauge)—*concl'd*

Details of construction—

The line is 20.83 miles long and connects Wadhwan with Dhrangadra. Its construction was sanctioned in 1897 and it was opened in 1898.

Permanent way—The permanent-way consists of 41 $\frac{1}{4}$ -lb flat-footed steel rails laid on deodar sleepers

Ballast—The ballast used is of broken hard sand-stone

Fencing—The line is unfenced

Curves—The sharpest curve is of 1,400 feet radius

Gradients.—The ruling gradient is 1 in 175

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, 14 (a).

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings.
	Rs	Rs	Rs		Rs	
1897	5,830					
1898	5,93,589	23,305	10,617	1.70	37	54.62
1899	6,06,104	63,876	20,978	3.46	59	67.16
1900	5,86,534	57,366	18,986	3.24	53	66.91
1901	5,66,100	46,196	11,765	2.01	43	74.53
1902	5,87,911	37,731	8,075	1.38	35	78.60
1903	5,66,638	43,058	11,713	1.99	40	72.80
1904	5,87,116	47,516	15,446	2.63	44	67.49
1905	5,66,695	49,043	13,375	2.28	45	72.73

14 (c) Jamnagar railway (3' 3 $\frac{1}{2}$ " gauge)—

This line was constructed for the Navanagar State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked

Details of construction—

The railway is 54.22 miles long and connects Rajkot with Bedi Bandar. Its construction was sanctioned in 1893 and it was opened in 1897.

Permanent way—The permanent-way consists of 41 $\frac{1}{4}$ -lb flat-footed steel rails on creosoted pine and deodar sleepers

Ballast—The ballast used is of broken stone

Fencing—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard

Curves—The sharpest curve is of 1,000 feet radius

Gradients—The ruling gradient is 1 in 200

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, 14 (a)

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs	Rs.		Rs	
1894	17,000			..		
1895	62,956			..	..
1896	14,91,727					
1897	22,50,538	84,476	28,954	1.29	41	63.73
1898	23,18,496	1,02,945	31,751	1.37	36	69.12
1899	23,68,558	1,26,323	51,540	2.23	63	59.20
1900	23,09,491	1,49,153	59,510	2.58	53	60.60
1901	23,09,969	1,36,814	51,401	2.23	48	62.29
1902	23,53,240	1,81,104	53,751	2.28	46	59.00
1903	23,58,338	1,39,756	60,122	2.55	50	56.98
1904	23,27,281	1,41,030	56,721	2.44	58	59.78
1905	23,27,105	1,48,841	62,063	2.66	53	59.20

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number ^{Main head 14}
_{Sub heads (a) to (d)} BHAVNAGAR-GONDAL-JUNAGAD PORBANDAR RAILWAY SYSTEM—*concl.*

14. (d) Jetalsar-Rajkot railway (3' 3½" gauge)—

This line was constructed for the Jetalsar Rajkot Railway Syndicate by the Bhavnagar-Gondal Junagad-Porbandar railway by which it is being worked

Details of construction—

This line is 46 21 miles long. Its construction was sanctioned in 1892 and it was opened in 1893

Permanent-way—The permanent way consists of 41½ lb flat footed steel rails on creosoted pine sleepers, except for five miles where the rails are laid on steel trough sleepers

Ballast—The ballast used is of broken stone

Fencing—The line is unfenced except between Rajkot Para and Rajkot Junction

Curves—The sharpest curve is of 955 feet radius

Gradients—The ruling gradient is 1 in 200

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, 14 (a)

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Farnings per mile per week	Proportion of expenses to earnings
1892	Rs 7,89,792	Rs	Rs		Rs	
1893	14,35,593	1,03,006	50,896	8.55	59	50.59
1894	14,99,605	1,55,556	61,152	4.08	65	60.68
1895	15,03,585	1,83,388	77,448	5.15	76	57.76
1896	15,29,365	1,97,116	84,238	5.51	82	57.26
1897	15,47,463	2,05,253	84,720	5.47	85	58.72
1898	15,78,017	1,78,941	76,057	4.82	74	57.50
1899	15,83,268	1,93,927	78,726	4.97	75	60.43
1900	15,74,081	2,02,718	80,214	5.43	84	57.47
1901	15,74,083	1,76,388	67,251	4.27	73	61.87
1902	15,78,593	1,44,917	54,485	3.15	60	62.25
1903	15,78,658	1,66,404	63,230	4.01	69	62.00
1904	15,78,655	1,88,439	69,248	4.39	78	63.25
1905	15,80,207	1,91,155	71,832	4.74	80	60.83

TABLE II

Number ^{Main head 15}
_{Sub heads (a) & (b)} BURMA RAILWAYS SYSTEM—

Lines comprising the system.—The Burma railways system is made up of—

(a) Burma railways (3' 3½" gauge)	Open line	Under construction or sanctioned for construction	Total
	Miles	Miles	Miles
(b) Burma railways extensions (3' 3½" gauge)	1,340.15	6.70	1,346.85
		186.93	186.93
Total	1,340.15	103.63	1,533.78

15 (a) Burma railways proper (3' 3½" gauge)—

The Burma Railways Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3' 3½" gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines—Rangoon to Prome on the Irrawaddy river, Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sigaung, and Sigaung to Mogaung, with an extension to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

Details of construction—

The open mileage of the Burma railways, 1,340.15 miles, consists of (1) *Main line section*, main line (Rangoon to Mandalay), 386 miles, branches, 81.60 miles, (2) *Irrawaddy section* (Rangoon to Prome), 161 miles, (3) *Mu Valley section*, main line (Sigaung to Myitkyina), 331.29 miles, branches, 91.16 miles, (4) *Mandalay-Kunlong section* (Myohaung to Lashio), 177.84 miles, and (5) *Bassein-Henzada Letpadan section*, 110.96 miles. Of the above 23.80 miles are double line.

First sanction to the construction was given in 1874, and the first three sections were opened through in 1889, 1877 and 1898, respectively, and the last two sections in 1903.

Besides the above 6.70 miles were sanctioned for construction in 1905.

Permanent-way—The rails in use on the system are 50-lb and 41½-lb flat-footed steel. The sleepers throughout are generally of teak, pynma and pinkado, the last named largely predominating.

Ballast—The ballast used is either shingle or broken stone.

Fencing—The main line (Rangoon to Mandalay) and the Irrawaddy line (Rangoon to Prome) are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Mandalay-Kunlong section is unfenced. On the Bassein-Henzada line, the Bassein and Henzada station yards are fenced and the work of fencing the whole length is now in progress.

Curves—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet, on the Rangoon-Prome section of 1,146 feet. The sharpest curves on the Bassein-Henzada, Letpadan-Tharawaw, Meiktila-Myingyan and Sigaung-Alon branches have radii of 955, 1,432, 1,273 and 2,865 feet, respectively. On the Lashio branch the sharpest curve has a radius of 337 feet. On the Mu Valley line, the Katha branch and the Nankan-Mohnyin section the sharpest curve has a radius of 573 feet.

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 15
Sub heads (a) and (b) BURMA RAILWAYS SYSTEM—*concl'd*15 (a) Burma railways proper (3' 3½" gauge)—*concl'd*Details of construction—*concl'd*

Gradients—The ruling gradient on the main line is 1 in 200, uncompensated, on the Lashio branch it is 1 in 25, compensated, on the Mu Valley 1 in 60, uncompensated, on the Myingyan branch, 1 in 100, uncompensated, on the Sagaing-Alon branch, 1 in 150, uncompensated, and on the Katha branch, 1 in 50, compensated

Terms of contract—

The railways are worked under the following contract —

Contract of—9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management

The general conditions of the contract are as follows —

Government aid—Interest is guaranteed at 2½ per cent on the Company's share capital Land was provided free

Currency of contract—Government may determine the contract, after giving six months' notice, if the Company fails to perform its obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years Government may also determine the contract on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice On the determination of the contract from any cause the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter

Power of Company to surrender contract—Nil

Terms of working—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs 15 per mile of line open in each half year, and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half year are to be applied in payment to Government of—

(1) The equivalent of the interest paid for the half-year on any debentures issued by the Company,

(2) The equivalent of the guaranteed interest at 2½ per cent per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company,

(3) The equivalent of interest at 2½ per cent per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government

After payment of the interest above mentioned, any surplus which may remain unpaid in a year ending on the 30th June, to be divided between Government and the Company in the proportion of four-fifths to the former and one fifth to the latter

Rates and fares—Certain maxima and minima have been fixed within which the Company is permitted to vary rates

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Company's share of net earnings	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs	Rs	Rs	Rs	Rs	Rs		
1877								61	129 36
1878								115	93 03
1879	1,22,86,507	9,55,913	1,41,743	1 14	5,47,438		-4,05,605	114	83 17
1880	1,25,87,319	13,22,710	3,21,085	4 14	5,62,331		-41,216	158	60 60
1881	1,36,61,993	15,43,622	6,45,077	4 73	5,86,210		+58,867	184	58 21
1882	1,78,39,922	15,75,091	6,30,440	3 53	6,23,969		+6,461	188	59 99
1883	2,10,77,689	15,64,982	5,60,766	3 55	7,46,068		-18,302	187	64 66
1884	2,56,37,089	21,05,421	8,21,986	3 21	9,69,215		-1,47,279	181	60 96
1885	2,72,95,313	21,3,656	4,73,123	1 73	10,61,184		-5,68,061	143	78 18
1886	2,88,52,601	26,57,955	9,41,149	3 26	12,64,442		-3,23,093	156	64 51
1887	3,66,52,817	33,24,263	15,58,303	4 25	19,15,249		+43,054	197	53 12
1888	4,63,73,677	33,76,218	12,1,960	2 63	18,18,560		-5,41,600	171	62 33
1889	5,12,49,158	46,90,263	15,73,512	3 07	20,17,224		-4,41,672	169	66 45
1890	5 56 22,296	54,71,432	23,48,191	4 22	21,3,308		+2,10,883	210	57 08
1891	6 03 31 269	58,51,197	23,71,392	3 90	23,23,237		+49,105	199	59 50
1892	6 61 02,875	71,00,618	13,96,038	5 10	21,90,221		+8,95,867	237	52 31
1893	7,03,17,005	67,32,506	22,12,492	3 19	27,19,995		-1,77,503	178	66 64
1894	7,37 14,721	62,87,354	18,23,323	3 15	25,94,375		-5,71,017	164	63 05
1895	7,57,29,650	67,11,062	27,92,356	3 57	30,01,163		-2,97,807	169	59 73
1896	8 13 44 229	74,08,558	29,85,751	3 67	34,13,442		-4,57,691	167	66 76
1897	8,73,31,890	86,76,103	38,82,673	4 45	38,31,674	1,62,877	-11,19,978	188	55 25
1898	9 24 93 509	89,91,411	37,88,593	4 10	39,49,899	1,61,076	-3,22,452	184	57 97
1899	10,11,17 617	88,25,721	35,78,407	3 54	39,30,209	1,24,994	-3,81,796	179	59 45
1900	11,33,96,655	1,10,29,917	48,91,824	4 43	38,19,026	3,47,606	+6,08,192	195	55 62
1901	11 99,22,408	1 18,85,329	49,89,676	4 16	40,41,108	4,42,439	+5,06,109	197	58 02
1902	12 70,23,590	1 25,02,671	52,72,683	4 66	43,04,823	4,69,365	+4,08,495	203	57 83
1903	13,01 30 277	1,36,14,478	52,19,322	4 01	44,06,500	4,32,216	+3,80,576	197	61 66
1904	13 38 28 678	1,51,02,418	65,70,760	4 92	14,71,268	5,92,997	+15,06,495	216	56 19
1905	13,55,91,056	1,57,75,957	61,81,063	4 56	45,35,474	6,77,512	+9,67,547	226	60 82

15 (b) Burma railways extensions (3' 3½" gauge)—

Details of construction—

There are two lines under construction, viz., (1) Pegu to Martaban, 121 27 miles long, which was sanctioned in 1903; and (2) Hengzada to Kyangin, 65·66 miles long, sanctioned in 1904

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 16
Sub head (a) DEOGHUR RAILWAY (3' 3 $\frac{1}{2}$ " gauge)—

Details of construction—

This line connects Deoghur with Baidyanath, a station on the East Indian Railway, and is 4 79 miles long. It was sanctioned in 1881 and opened in 1882.

Permanent-way—The permanent-way is laid with 36-lb steel rails on wooden sleepers

Ballast—The line is ballasted throughout

Fencing—The line is unfenced

Curves.—The sharpest curve has a radius of 2,640 feet

Gradients—The ruling gradient is 1 in 60

Terms of contract—

The railway is worked under the following contract —

Contract of—12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working

The general conditions of the contract are as follows —

Government aid—Land alone was provided free of charge

Terms of contract—Messrs Burn & Co constructed the railway with capital raised locally and without any guarantee

Currency of contract—Government may, after giving six months notice, determine the contract, and take over the railway at a valuation based on the earnings for the two years immediately previous to such resumption, if the Company fails to perform its obligations. Government may also, by giving 12 months' notice, determine the contract and take over the railway at a valuation calculated at the average market rate of the shares during the previous three years, together with bonus not exceeding 20 per cent of such value, after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years.

Rates and fares—Certain maxima have been fixed within which the Company is permitted to vary rates

Statistics of working—

TABLE I.

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1883	Rs 2,73,331	Rs 19,039	Rs 6,242	2 28	Rs 79	68 00
1884	2,75,000	23,735	10,704	3 90	83	51 90
1885	2,75,000	23,987	9,908	3 60	88	58 69
1886	2,75,042	25,017	11,743	4 27	100	53 06
1887	2,75,043	24,532	12,108	4 40	98	50 64
1888	2,81,180	25,812	11,521	4 10	104	55 37
1889	2,82,876	28,583	12,695	4 49	115	55 51
1890	2,82,616	26,095	10,915	3 86	105	58 17
1891	2,82,752	31,165	15,429	5 46	125	50 49
1892	2,88,329	26,964	9,707	3 37	108	61 00
1893	2,87,361	37,809	19,103	6 65	152	49 47
1894	2,87,526	29,425	9,659	3 36	118	67 17
1895	2,88,086	33,611	15,308	5 31	130	54 46
1896	2,87,797	30,014	11,493	1 00	120	61 69
1897	2,87,942	30,320	11,152	3 87	122	63 22
1898	2,68,453	32,100	6,601	2 28	129	79 44
1899	2,87,525	33,262	6,678	2 32	134	79 92
1900	2,87,379	34,900	7,376	2 56	140	78 87
1901	2,85,265	48,293	18,616	6 53	194	61 45
1902	3,01,057	29,758	6,025	2 00	120	79 75
1903	3,01,057	40,458	10,622	3 53	162	73 75
1904	3,01,057	46,635	14,701	4 88	187	68 48
1905	3,24,441	45,397	13,582	4 19	182	70 08

Number Main head 17
Sub heads (a) and (b) DIBRU-SADIYA RAILWAY SYSTEM—

Lines comprising the system—The Dibru-Sadiya railway system is made up of—

	Open line Miles	Under construction or sanctioned for construction Miles	Total Miles
(a) Dibru Sadiya railway (3' 3 $\frac{1}{2}$ " gauge)	77 50	8 50	86 00
(b) Ledo and Tukai Margherita Colliery railway (3' 3 $\frac{1}{2}$ " gauge)	8 50		8 50
Total	86 00	8 50	94 50

17. (a) Dibru-Sadiya railway proper (3' 3 $\frac{1}{2}$ " gauge)—

Details of construction—

This line is 77 50 miles long and may be divided into main line (Dibrugarh to Dihing Bridge), 61 50 miles, and the Talap branch, 16 miles. Its construction was sanctioned in 1881 and it was opened through in 1885.

There were 8 50 miles sanctioned for construction in 1905.

APPENDIX 38—*contd*

History of railways constructed and in progress

[For Index see page 106]

Number Main head 17 Sub heads (a) and (b) DIBRU SADIYA RAILWAY SYSTEM—*contd*

17 (a) Dibrus-Sadiya railway proper (3' 3½" gauge)—*concl*

Details of construction—*concl*

Permanent-way—The line is laid with 41½-lb and 50 lb flat footed steel rails. The sleepers are uranium and cast iron plate of the Denham Olpherts' type.

Ballast—The line is partially ballasted with broken stone.

Fencing—The line is unfenced, with the exception of a short length at Dibrugarh.

Curves—The sharpest curve is of 700 feet radius.

Gradients—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts—

Contracts of—26th May 1880 (between the Secretary of State and the Assam Railway Company) for maintenance and working.

25th July 1881—Contract modifying that of 1880.

The general conditions of the contracts are as follows—

Government aid—Government guaranteed the payment of a subsidy, not exceeding in any year Rs 80,000 twelve months after the opening of the main line or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent of the paid up capital of the main line. Government similarly guaranteed a subsidy for the Mukum branch, not exceeding Rs 20,000 in any year. The payment of guarantee terminated on the 30th June 1903. The free use of public roads is also provided for.

Currency of contract—If the Company fails to fulfil its obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. Government may determine the contract, on giving 12 months' notice (clause 19 of contract, dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent in excess of the value of the Company's property.

Note—The Company having waived all its rights under clause 7 of contract dated 25th July 1881 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No P.W. 1731, dated the 2nd December 1901).

Power of Company to surrender contract—Nil.

Terms of working—The Company to maintain the railway and the road on which the rails are laid and the rolling stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

Rates and fares—These were subject to approval by Government from time to time while subsidy was payable. If the net profits exceed 12 per cent of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percentage on capital outlay	Subsidy from local Government	Total income	Percentage of total income on capital outlay	TABLE II		REMARKS
								Rs	Rs	
1881	22,22,23	45,20	—35,275			—8,375		52	171.70	
1882	30,6,87	2,06,13	—6,46		51,55	—13,806		67	13,61	
1883	49,46,29	9,7,335	—63,664		54,760	—9,361		63	123.03	
1886	49,73,73	9,4,479	50,154	1.07	51,551	1,07,809	2.17	81	80.65	
1887	53,42,60	4,01,028	1,0,540	1.02	1,00,000	2,0,540	3.80	91	74.68	
1888	51,3,14	4,25,510	1,01,759	1.89	1,00,900	2,0,759	3.7	105	76.09	
1889	52,18,0	4,61,018	1,35,117	2.27	1,01,000	2,1,147	4.08	114	72.26	
1890	57,06,682	5,14,266	1,70,960	3.10	1,00,000	2,70,960	4.85	127	65.50	
1891	67,05,474	4,98,692	1,70,526	2.54	1,00,000	2,70,526	4.03	123	65.80	
1892	61,66,304	5,13,213	1,63,719	2.25	1,00,000	2,63,719	3.79	127	63.10	
1893	71,70,62	5,12,98	1,2,972	2.13	1,00,000	2,52,972	3.3	127	70.13	
1894	70,9,187	5,31,145	1,9,772	2.76	1,00,000	2,9,772	4.17	133	63.18	
1895	74,02,729	6,01,12	2,60,543	3.64	1,00,000	3,60,543	4.99	149	55.16	
1896	71,01,106	6,47,360	3,12,296	4.22	1,00,000	4,12,296	5.57	161	51.76	
1897	74,20,119	7,4,189	2,64,750	3.7	1,00,000	3,64,750	4.92	192	68.12	
1898	74,41,174	7,81,415	2,82,478	3.80	1,00,000	3,82,478	4.33	194	63.85	
1899	74,51,153	8,59,414	4,49,688	6.03	37,978	4,8,666	6.51	213	47.68	
1900	77,14,949	9,00,817	4,62,381	5.93		4,62,381	5.99	224	48.67	
1901	82,00,747	9,28,578	4,73,307	5.77	...	4,73,307	5.7	230	49.03	
1902	82,00,694	8,51,680	4,11,187	5.01		4,11,187	5.01	211	51.75	
1903	82,92,530	9,1,777	4,57,974	5.56		4,57,974	5.56	227	50.65	
1904	87,01,73	9,48,473	4,31,317	4.84		4,31,317	4.84	235	51.58	
1905	87,31,147	9,4,493	4,32,03	4.95		4,32,03	4.95	237	54.73	

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 17
Sub heads (a) and (b) DIBRU-SADIYA RAILWAY SYSTEM—*concl.*

17. (b) Ledo and Tikak-Margherita Colliery railway (3' 3½" gauge)—

The line was used originally only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

Details of construction—

The line is 8 50 miles long, viz., main line (Dihing bridge to Ledo) 5 50 miles, and branch (Margherita to Namdang) 3 miles. The main line was opened in 1884 and the branch in 1901.

Permanent way—The line is laid with 50-lb flat footed steel rails on unarm sleepers

Ballast—The main line is three-fourths ballasted with broken stone, but the Namdang branch is unballasted.

Fencing—The line is unfenced

Curves—The sharpest curve is of 800 feet radius

Gradients—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following contract—

Contract of—30th July 1881, between the Secretary of State and the Assam Railways and Trading Company, for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms—Contained in Government of India, Public Works Department, No 623 R. T., dated the 6th August 1896.

The general conditions are as follows—

Government aid—Nil

Currency of contract—The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles, and for a further term of 30 years within an area of at least 4 square miles.

Power of Company to surrender contract—Nil

Terms of working—The colliery to be charged with the cost of maintenance of the branch and sidings owned by it and 5 per cent of its gross earnings for the use of rolling stock, all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings.

Rates and fares—Certain rates and fares have been sanctioned by Government

Statistics of working—

Calendar year	TABLE I				TABLE II	
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
					Rs	
1897	11,46,210	45,671	8,024	0.70	63	82.51
1898	12,00,698	55,313	9,752	0.81	142	93.23
1899	12,83,416	63,084	22,053	1.72	162	65.04
1900	12,83,375	65,721	17,931	1.40	109	72.64
1901	16,30,162	70,293	11,115	0.68	123	84.15
1902	16,53,446	58,59	437	0.03	102	99.25
1903	16,62,082	50,077	-8,208		103	113.89
1904	16,62,088	56,108	13,158	0.79	120	76.35
1905	16,78,156	50,499	27,210	1.62	127	54.22

Number Main head 18
Sub heads (a) to (c) JODHPUR-BIKANER RAILWAY SYSTEM—

Lines comprising the system—The Jodhpur-Bikaner railway system is made up of—

	Open line Miles
(a) Jodhpur Bikaner (Jodhpur section) (3' 3½" gauge)	.
(b) Jodhpur Bikaner (Bikaner section) (3' 3½" gauge)	.
(c) Jodhpur Hyderabad railway (British section) (3' 3½" gauge)	.
Total	833.22

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 108]

Number ^{Main head 18}
_{Sub heads (a) to (c)} JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*

18. (a) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)—

Details of construction—

The open mileage of the section is 463 89 miles. First sanction to construction was accorded in 1881 and the line was opened through to the British frontier in 1900. The Merta city branch was opened in 1905.

Permanent-way—The line is laid with 36-lb, 41½-lb and 50-lb flat-footed steel rails. There are also some 36-lb iron rails in the Merta city branch. The sleepers are steel trough, deodar and pine.

Ballast—On the greater portion of the line the ballast consists of coarse sand, kunkur and broken stone.

Fencing—With the exception of a few stations, the line is unfenced.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts—

Contracts of—13th July 1889 } (between the Government of India and the Jodhpur and Bikaner Durbars) for
30th July 1889 } constructing and working the line

The general conditions of the contracts are as follows—

Government aid—The line is the exclusive property of the two Durbars.

Currency of contracts—These contracts may be modified at any time by mutual consent.

Terms of working—Each Durbar to receive all the profits of the section of line belonging to that Durbar.

Rates and fares—No provision was made for rates and fares in the contracts, but certain rates and fares were approved by executive order.

Statistics of working—

TABLE I

Calender year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1883	Rs 4,99,866	Rs 40,361	Rs 23,110	4 62	Rs 42	42 74
1884	8,09,995	64,262	31,748	3 92	39	50 59
1885	15,40,335	1,70,691	1,12,505	7 30	54	34 30
1886	21,22,593	2,05,728	1,33,318	6 23	62	35 20
1887	22,81,433	3,18,703	1,91,677	8 40	55	39 66
1888	22,60,006	3,60,503	1,91,555	8 40	56	46 91
1889	22,73,978	3,59,458	1,92,258	8 45	56	46 50
1890	22,71,338	3,70,825	1,96,192	8 68	58	47 09
1891	41,87,110	6,12,839	3,34,364	7 99	66	45 44
1892	60,09,552	9,16,980	5,28,911	8 73	74	44 14
1893	64,74,611	8,31,765	4,33,895	6 70	52	47 83
1894	64,49,374	10,81,156	6,69,373	10 88	65	38 09
1895	64,82,934	9,74,738	5,69,246	8 85	58	41 60
1896	64,78,328	11,64,465	7,38,273	11 40	70	36 60
1897	74,90,176	11,22,658	7,44,799	9 94	67	33 66
1898	1,00,87,594	12,22,726	7,30,956	7 25	73	42 22
1899	1,16,42,183	19,09,097	11,06,844	10 29	102	38 88
1900	1,14,28,508	16,28,473	9,07,480	7 94	81	44 27
1901	1,17,24,806	15,67,073	7,14,826	6 10	66	54 39
1902	1,18,69,424	16,76,216	8,35,202	7 04	71	50 17
1903	1,19,31,439	16,34,708	8,91,196	7 47	69	45 48
1904	1,21,90,810	16,87,624	9,58,365	7 86	71	49 21
1905	1,22,63,774	19,16,254	11,01,294	8 98	79	42 53

18 (b) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)—

Details of construction—

The section is 245 35 miles long. Its construction was first sanctioned in 1890 and it was opened through to Bhatinda in 1902.

Permanent-way—The permanent-way consists of 36-lb flat-footed steel rails on steel trough and deodar sleepers.

Ballast—The ballast consists of coarse sand and small kankur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing—The line is unfenced, except at a few stations.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 150.

Terms of contracts—

See under Jodhpur section, 18 (a)

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number ^{Main head 18}
 Sub heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—*concl'd.*

18 (b) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)—*concl'd*

Statistics of working—

TABLE I.

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1890	Rs 4,15,590	Rs 5,130	Rs 2,724	0.19	Rs 36	46.99
1891	14,32,706	76,541	24,901	2.63	34	67.47
1892	9,18,622	66,725	25,733	2.66	30	61.43
1893	9,65,711	80,274	40,147	4.17	35	49.61
1894	9,69,407					
1895	9,71,031	86,389	4,036	4.61	33	47.89
1896	9,73,294	1,50,727	75,382	7.71	53	37.56
1897	9,73,443	1,17,010	65,604	6.63	42	44.02
1898	23,14,152	1,7,172	77,616	3.35	31	43.4
1899	23,61,917	1,71,639	1,01,314	3.65	37	40.22
1900	32,60,432	1,92,309	1,04,962	3.22	43	45.43
1901	48,515	2,46,875	1,05,607	2.16	31	57.18
1902	52,49,39	3,22,022	1,12,581	2.72	30	55.72
1903	5,70,920	5,20,321	2,66,197	5.19	41	49.33
1904	50,93,519	7,21,901	4,05,677	7.6	57	43.96
1905	51,72,406	8,83,432	5,62,383	10.67	69	36.34

18 (c) Jodhpur-Hyderabad (British section) (3' 3½" gauge)—

Details of construction—

The line connects Hyderabad (Sind) with the Jodhpur system and is 123.98 miles long. Its construction was first sanctioned in 1891 and it was opened through in 1900.

Permanent way—The section is laid with 60 lb iron, and 50-lb and 41½-lb flat-footed steel rails on deodar and Denham-Olpherts' cast-iron sleepers.

Ballast—The ballast is of kunkur, stone and broken brick.

Fencing—With the exception of a few stations, the line is unfenced.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 150.

Terms of contract—

The railway is worked under the following agreement—

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of railway, on the 3' 3½" gauge, from Balotia to Hyderabad and for working the section from the Jodhpur frontier to Hyderabad.

The general conditions of the agreement are as follows—

Currency of agreement—As regards the working of the railway, this agreement remains in force until determined by either party, on 12 months' notice on the 1st day of January or the 1st day of June in any year.

Terms of working—Working expenses, excluding maintenance, are divided between the British and Native State sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

Rates and fares—Maximum and minimum rates and fares and the classification in force on the North Western (State) railway from time to time to be in force on the British section.

Note—Government of India in letter No. 205 R T, dated the 6th March 1900 approved of the Rajputana Malwa railway classification of goods which is in force on the Native State section being adopted on the British section the stipulation in agreement requiring the adoption of the North Western (State) railway classification remaining unaltered in case it may be considered desirable to enforce it hereafter.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings	REMARKS
1891	Rs 2,31,401	Rs 83,206	Rs -1,994		Rs 5,356	Rs -5,356			
1892	16,31,818	83,206	16,471	0.99	59,619	Rs -61.98	29	105.87	The figures of capital outlay in 1900 include the outlays on the Hyderabad-Rahola section.
1893	16,61,691	1,30,817	16,471	0.99	60,767	Rs -49.20	43	67.11	
1894	17,27,619	1,4,222	36,062	2.08	63,910	Rs -32,578	47	75.17	
1895	17,71,095	1,68,139	46,600	2.63	71,080	Rs -24,171	55	72.28	
1896	18,00,799	1,87,503	64,376	3.57	71,420	Rs -7,044	61	65.67	
1897	18,37,716	2,05,182	19,413	3.93	73,512	Rs -14,159	67	71.04	
1898	20,19,772	2,22,647	70,159	3.17	77,533	Rs -7,394	73	65.19	
1899	23,48,918	2,2,242	88,463	2.61	1,07,880	Rs -18,917	71	60.73	
1900	41,71,104	1,93,211	65,933	1.10	1,78,984	Rs -1,13,051	65	65.93	
1901	38,81,861	4,24,907	1,73,567	4.47	1,52,479	Rs +21,134	66	59.09	
1902	40,45,972	5,04,008	2,18,814	5.41	1,59,771	Rs +9,043	78	55.59	
1903	40,45,938	5,81,091	2,62,370	6.49	1,01,179	Rs +1,02,210	91	55.09	
1904	39,45,681	6,45,728	3,15,006	8.2	1,51,846	Rs +1,00,160	101	45.82	
1905	39,67,948	7,8,939	3,69,002	9.80	1,58,622	Rs +2,10,380	112	49.03	

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number ^{Main head 19}
Sub-head (a) MORVI RAILWAY (3' 3½" and 2' 6" gauges)—

The 2' 6" gauge connection between Wadhwan and Rajkot by this railway has been converted to the 3' 3½" gauge— from Wadhwan to Thul, 31 34 miles, on a new alignment and onwards to Rajkot, 42 60 miles, on the original alignment with a few unimportant diversions. The line between Vankaler and Morvi has been retained on the 2' 6" gauge.

Details of construction—

The line is 89 64 miles long, divided into the 3' 3½" gauge section (Wadhwan to Rajkot), 73 94 miles and the 2' 6" gauge section (Vankaler to Morvi), 15 70 miles. The construction of the 3' 3½" gauge section was sanctioned in 1902 and this section was opened in 1905. The construction of the 2' 6" gauge section was sanctioned in 1883 and it was opened in 1887.

There were 2 75 miles sanctioned for construction in 1905.

Permanent-way—The permanent way on the 3' 3½" gauge section consists of 41½-lb flat-footed steel rails on half-round teak and creosoted pine sleepers, and that on the 2' 6" gauge section consists of 29-lb flat footed steel rails on creosoted pine sleepers.

Ballast—The line is ballasted with moorum (disintegrated) trap.

Fencing—The line is unfenced.

Curves—The sharpest curve on the 3' 3½" gauge is of 950 feet radius, and that on the 2' 6" gauge is of 300 feet radius.

Gradients—The ruling gradient is 1 in 150 on both gauges.

Terms of contract—

The Morvi railway is owned by His Highness the Thakore Sahib of Morvi, and is under his control.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings.	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1886	Rs 685,671	Rs 31,822	Not available		Rs 30	103 28
1887	11 00 00	1,29 107	16 00 1	1 54	39	86 87
1888	11 77 42	1,6 037	21 09 1	1 47	46	86 44
1889	12 16 800	1,7 721	6 727	4 5	50	68 01
1890	20 15 867	2,9 227	87 50	4 32	60	70 34
1891	20 5 99	3,0 419	1,0 817	5 28	63	61 90
1892	21 01 19	3,0 171	1,30 570	6 19	63	57 83
1893	21 57 363	7,22 518	1,14 12	6 76	66	51 86
1894	21 23 526	4,20 318	1,14 67	6 42	65	55 46
1895	21 99 206	9,69 972	2,00 127	8 44	75	45 91
1896	23 92 315	3,80 833	1,81 021	7 62	79	58 06
1897	21 76 7.7	4,27 143	2,11 612	8 52	87	50 49
1898	21 79 118	3,76 220	1,63 990	6 61	77	56 41
1899	22 06 414	4,0 1 6	1,70 053	6 78	86	59 56
1900	27 28 115	4,23 908	1,58 794	5 82	87	62 49
1901	27 59 152	3,58 663	1,2 571	4 55	73	65 00
1902	27 71 718	3,0 658	1,13 299	4 11	61	62 86
1903	27 88 152	2,08 061	1 11 749	5 19	61	61 44
1904	34 06 190	9,54 676	1,88 909	5 55	73	46 73
1905	43 90 817	3 23 640	1,14 476	3 97	69	46 99

TABLE II

Number ^{Main head 20}
Sub heads (a) to (c) ROHILKUND AND KUMAON RAILWAY SYSTEM—

Lines comprising the system—The Rohilkund and Kumaon railway system is made up of—

Under construction or sanctioned for construction	Total	Open line	Miles
		Miles	
53 92	148 00	148 00	201 92
237 04			237 04
39 50			39 50
Total	330 46	148 00	478 46

Running powers—

Home line over foreign line—

Bhojepura to Bareilly, Lucknow Bareilly railway, for passenger and goods trains

Foreign line over home line—

Bengal and North Western, Dalganj to Aishbagh, for passenger and goods trains

Miles

12 00

3 40

20 (a) Rohilkund and Kumaon railway proper (3' 3½" gauge)—

Details of construction—

The open line from Bhojepura to Kathgodam is 53 92 miles long. Its construction was sanctioned in 1882 and it was opened in 1884.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 20
Sub heads (a) to (c) ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*20 (a) Rohilkund and Kumaon railway proper (3' 3½" gauge)—*contd.*Details of construction—*concl'd*

There are 148 miles under construction, *viz.*, (1) the Bareilly-Soron branch, 56 miles, (2) M. radabād-Rāmnagar branch, 47 miles, and (3) the Lalkua-Kashipur branch, 45 miles. The construction of these branches was sanctioned in 1903.

Permanent way—The permanent-way consists of 41½-lb. and 50-lb steel rails on sal sleepers.

Ballast—The ballast consists of broken brick and shingle.

Fencing—The line is partially fenced.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 70.

Terms of contracts—

The Rohilkund and Kumaon and Lucknow-Bareilly railways are worked under the following contracts—

Contracts of—12th October 1882—Rohilkund and Kumaon Railway Company's original contract

8th September 1890—Contract for the working and maintenance of the Lucknow-Bareilly railway and the Company's line as one system (Principal contract)

· 31st December 1892—Relating to advances of capital by Government

5th February 1901—Contract modifying the terms of the previous contracts

21st April 1903—Contract as to rate of exchange for purposes of contracts of 12th October 1882 and 8th September 1890

15th July 1901—Contract for construction of new branches and taking over a branch from Kasganj to Soron and other matters supplemental to contracts of 1882, 1890, 1901 and 1903

The general conditions of the contracts are as follows—

Government aid—Company's section—Government guaranteed interest at 4 per cent in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract, thereafter a subsidy of Rs 20,000 half-yearly for ten years from date of opening, which ceased on 31st December 1894. Land was provided free, subject to the condition that the Company pays on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Bareilly section—The Company to raise £160,000 capital by debentures which Government guarantees as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs 96,000. Land was provided free of charge.

Note—All sums to be advanced by Government after the 31st December 1903 bear interest at the rate of 3½ per cent per annum under the agreement dated the 5th February 1901.

Terms of contract—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross earnings.

Currency of contracts—

(1) *Rohilkund and Kumaon railway contract*—Government may terminate the contract at the end of the 30th year (*i.e.*, on the 31st December 1912) or the 50th year (*i.e.*, on the 31st December 1932), by giving 12 months' notice. If deducting the Government share of surplus profits during the 5 years preceding the termination Government may also determine the contract at any time on six months' notice, if the Company fails to observe its obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove its property within nine months from the termination of the contract, otherwise it becomes the property of the Government.

(2) *Lucknow-Bareilly railway*—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year, by giving twelve months' notice. In the event, however, of the original contract, dated the 12th October 1882, terminating by efflux of time or under notice of purchase or notice of determination, this contract, *ipso facto*, also terminates at the same time. Government may also terminate the contract if the Company fails to observe its obligations after six months' notice. On determination of the contract Government resume possession of the State railway on payment to the Company of the amount of the capital received, or take over its liabilities with respect to such capital.

Power of Company to surrender contract—Nil

Terms of working—Company's section—During the period that the Government are liable to pay interest, after deducting working expenses, (which may include any single item of capital expenditure, not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year, and a payment of Rs 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), the surplus

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 20
Sub heads (a) to (c) ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

20 (a) Rohilkund and Kumaon railway proper (3' 3½" gauge)—*concl'd*Terms of contracts—*concl'd*

profits, after repayment of the guaranteed interest, go to the Company. Subsequently half the surplus profits, after 5 per cent for the year (within a limit of £5,000 for each half-year), has been appropriated to the Company, are to be applied in repayment to Government of arrears of guaranteed interest and interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897 Government are to receive half the surplus profits in excess of 6 per cent.

Note.—It has been agreed that in calculating the surplus profits for division, sums received by the Company as its share of the surplus profits of the Lucknow Bareilly railway shall not be taken into account.

Lucknow-Bareilly section.—The working expenses of the system, (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as 'Minor Work,' subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year, and a payment of Rs 20 for every mile of line open to traffic to be made half yearly to Government for supervision), are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied (i) in meeting payment of interest on the debentures and of interest at 4 per cent on any further capital supplied by the Company for the undertaking or advanced by Government, (ii) in payment to Government of interest at 4 per cent on their capital in the undertaking, and (iii) the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (i) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I.

Calen dar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percen tage on capital outlay	Subsidy from Government	Total income	Percentage of total income on capital outlay	Earnings per mile per week	Proportion of expenses to earn nings	REMARKS
1884	Rs 19,40,276	Rs 36,543	Rs 1,731	0.09	Rs 40,000	Rs 1,734	0.09	Rs 51	95.16	
1885	21,71,124	2,38,572	40,153	1.85		80,153	3.69	68	66.40	
1886	22,52,762	3,00,191	Rs 832	3.72	40,000	1,23,822	5.50	86	*8.75	
1887	22,91,619	3,19,274	76,800	3.35	40,000	1,16,800	5.10	92	63.42	
1888	23,40,100	3,31,092	1,02,120	4.36	40,000	1,42,120	6.07	96	57.46	
1889	23,96,624	3,72,70	1,20,133	5.01	40,000	1,60,195	6.69	107	56.93	
1890	20,37,223	7,14,531	1,11,003	5.45	40,000	1,01,003	7.41	90	52.04	
1891	20,49,158	3,85,084	1,83,110	5.02	20,000	1,53,440	7.49	112	58.22	
1892	20,58,575	5,20,67	1,57,780	6.62	40,000	1,97,780	9.61	127	54.17	
1893	20,82,250	4,59,909	1,13,180	6.17	40,000	1,83,180	8.80	124	56.78	
1894	20,80,410	4,59,315	1,70,191	7.16	40,000	2,15,191	10.34	134	52.91	
1895	20,78,251	4,01,504	1,52,943	7.36		1,52,973	7.36	118	62.18	
1896	20,79,863	4,26,905	1,54,95	7.13		1,51,505	7.43	125	63.79	
1897	21,20,438	4,23,720	1,73,184	8.17		1,73,184	8.17	124	59.33	
1898	21,42,552	4,17,308	2,21,890	10.86		2,21,890	10.36	135	52.24	
1899	21,48,313	4,05,623	2,31,020	10.69		2,31,020	10.89	136	49.71	
1900	31,53,125	4,37,572	2,24,048	10.39		2,28,018	10.59	156	48.6*	
1901	22,09,423	3,81,314	2,09,896	9.50		2,09,896	9.50	112	4.39	
1902	23,35,911	4,10,626	2,18,317	9.97		2,18,317	9.74	146	46.83	
1903	25,69,790	4,13,147	2,20,405	8.51		2,20,405	8.51	121	46.65	
1904	43,55,775	4,18,787	2,21,403	5.15		2,24,103	5.15	122	46.41	
1905	93,34,639	4,10,664	1,54,126	6.30		1,74,126	*6.30	123	65.02	* Calculated on capital outlay on open line

20. (b) Lucknow-Bareilly railway (3' 3½" gauge)—

Details of construction—

The open mileage is 237.01 miles, and is divided into main line (Lucknow to Bareilly), 198.55 miles and branches, 38.49 miles. Sanction to the construction of the main line was recorded in 1881 and it was opened through in 1891.

Permanent-way.—The permanent-way consists of 41½-lb and 50-lb steel rails on sal sleepers.

Ballast.—The ballast consists of broken bricks, kunkur and shingle.

Fencing.—The line is partially fenced.

Curves.—There is only one curve with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100 except on the Dudhwa branch where it is 1 in 60.

Terms of contracts—

See under Rohilkund and Kumaon railway proper, 20 (a)

APPENDIX 38—contd

History of railways constructed and in progress.

[For Index see page 106]

Number Main head 20
Sub heads (a) to (e) ROHILKUND AND KUMAON RAILWAY SYSTEM—concl.

20 (b) Lucknow-Bareilly railway (3' 3 $\frac{1}{2}$ ' gauge)—concl

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Com. in shares of not earn in s	Gain or loss to the State	TABLE II				
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Farmings per mile per week	Pro of exp to earnings	Farmings per mile per week	Pro of exp to earnings	Rs
1883	4,84,913	10,2,9	8,9	0.06	11,192	—11,192						
1884	1,43,699	10,2,9	8,9	0.06	—3,72	—3,72						
1885	2,01,567	8,827	17,713	0.65	53,917	—36,004						
1886	12,16,146	1,15,996	28,729	0.68	1,18,570	—1,19,841						
1887	52,24,771	2,02,170	67,911	1.0	1,8,046	—1,17,122						
1888	52,8,670	3,57,327	9,01,1	1.87	2,03,93	—1,01,172						
1889	71,59,583	4,29,731	1,17,669	2.70	2,16,181	—68,271						
1890	65,33,524	4,56,733	1,32,38	2.02	2,30,691	—73,761						
1891	70,17,846	4,95,068	1,73,011	2.10	2,72,065	—69,014						
1892	61,60,801	6,82,836	2,71,601	3.36	3,07,551	11,501	—41,51					
1893	83,89,362	7,28,573	2,71,411	3.26	3,2,776	2,1*	—1,61					
1894	85,93,018	9,7,29	1,48,218	5.72	1,10,323	71,310	+ 21,58					
1895	87,22,466	8,25,918	3,11,116	3.59	3,50,196	15,634	+ 50,611					
1896	89,63,220	8,27,500	3,02,071	7.7	3,19,651	13,415	+ 60,29					
1897	91,02,715	8,27,371	2,776	1.61	1,61,7	26,080	+ 52,74					
1898	91,90,176	10,34,883	7,00,10	5.27	3,18,61	61,721	+ 68,07					
1899	94,97,148	1,72,400	6,93,355	6.63	3,6,27	76,832	+ 1,91,456					
1900	90,21,132	12,5,811	6,51,057	6.57	3,73,097	1,17,611	+ 1,31,210					
1901	1,01,83,945	13,72,520	7,78,124	7.14	3,91,706	9,10,	+ 2,67,113					
1902	1,19,96,019	14,53,19	7,69,505	6.81	1,1,528	71,6,6	+ 2,71,271					
1903	1,15,01,911	11,03,216	7,18,9	6.51	4,13,87	52,579	+ 2,47,701					
1904	1,17,13,595	11,9,121	7,97,671	6.81	4,18,38	7,187	+ 2,91,86					
1905	1,17,9,857	1,17,18	5,20,092	6.96	4,50,418	16,611	+ 3,53,733					

20 (c) Powayan Light railway (2' 6" gauge)—

The line is constructed entirely by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Rohilkund and Kumaon Railway Company from 17th December 1900.

Details of construction—

This line, which connects Shahjahanpur with Malihai, is 30.50 miles long. Its construction was first sanctioned in 1889 and it was opened through in 1894.

Permanent-way.—The permanent way consists of flat footed steel rails, weighing 25 lbs. to the yard, laid on all sleepers.

Ballast.—The line is ballasted with earth.

Fencing.—The line is unfenced except at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Powayan Light railway is worked under the following contracts—

Contract of—1st July 1901 (between the Secretary of State and the Powayan Light Railway Company) for maintenance and working.

6th November 1902 (between the Secretary of State and the Rohilkund and Kumaon Railway Company) as to terms of working.

The general conditions of the contracts are as follows—

Government aid—Land.

Currency of contract.—The contract is terminable on the 31st December 1912 or any time thereafter on one year's notice being given by either party.

Terms of working.—The working agency is to retain 70 per cent of the gross earnings until the line is fully equipped, and thereafter the same percentage is that at which the whole open system is worked, subject to a minimum of 60 per cent. The percentage so retained may include any single item of capital expenditure not exceeding Rs 200, subject to a maximum charge of Rs 20 per mile in each half year.

Rates and fares.—The same rates and fares as may from time to time be applicable to the Lucknow-Bareilly railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percent on capital outlay	Farmings per mile per week	Proportion of expenses to earnings
	Rs	Rs	Rs		Rs	
1901	8,11,015	66,862	18,059	2.79	1.8	70.00
1902	8,03,456	7,675	2,2,21	2.2	2.7	70.24
1903	8,04,619	71,815	28,482	3.18	3.5	60.34
1904	8,01,751	78,015	30,937	3.16	3.8	60.34
1905	8,04,751	92,011	36,707	4.10	4.5	60.37

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Van head 21
Sub heads (a) to (f) SOUTH INDIAN RAILWAY SYSTEM—

Lines comprising the system—The South Indian railway system is made up of—

	Open line Miles	Under construction or sanctioned for construction Miles	Total Miles
			Miles
(a) South Indian railway (3' 3½" gauge)	1,123 05	20 83	1,143 88
(b) Kanyakal Peralam railway (3' 3½" gauge)	14 65	,	14 65
(c) Pondicherry railway (3' 3½" gauge)	7 85	,	7 85
(d) Tanjore District Board railway (3' 3½" gauge)	99 46	,	99 46
(e) Tinnevelly Quilon (Travancore) (British section) (3' 3½" gauge)	50 48	,	50 48
(f) Tinnevelly Quilon (Travancore) (Native state section) (3' 3½" gauge)	57 98	,	57 98
Total .	1,353 47	20 83	1,374 30

21 (a) South Indian railway proper (3' 3½" gauge)—

Details of construction—

The total open mileage of the South Indian railway proper is 1,123 05 miles. This may be divided into (1) *Madras-Tuticorin section*, main line (Madras to Tuticorin), 446 80 miles, branches, 312 97 miles (2) *Pillupuram* to the construction of (1) was given in 1859 and it was opened through in 1879 (2) was sanctioned in 1888 and opened through in 1892

In addition to the above there are 11 83 miles under construction and 9 miles sanctioned for construction

Permanent-way—The rails in use are 50-lb and 52-lb bull-headed steel, 56-lb and 41½-lb flat-footed steel, 40 3-lb flat-footed and 68-lb double headed iron. The sleepers are cast iron pot, steel transverse and wooden

Ballast—The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed

Fencing—The line is fenced, with the exception of the Villupuram Dharmavaram and Palkala-Gudur sections and the Pamban branch which are fenced only at stations

Curves—The sharpest curve is of 500 feet radius

Gradients—The ruling gradient is 1 in 200, except on the length between Madras Beach and Fort and on the Villupuram-Dharmavaram, Palkala-Gudur, Trichinopoly-Madura, and Kanchi-Erode sections where it is 1 in 100

Terms of contracts—

The railway is worked under the following contracts—

Contract of—24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working

27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch

The general conditions of the contracts are as follows—

Terms of contract—The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was £4,197,557.

Company's stock at date of purchase £3,208 260 Premium 989,277 £4,197,557. The Secretary of State assumed all liability in connection with the Company's debentures and debenture stock which is irredeemable. The present Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was

under construction by the former Company at the date of the termination of its contract. Any further moneys required were provided either by the Secretary of State or raised by the Company under guarantee. Subject to the provision of the contract, all moneys paid by the Company become the absolute property of the Secretary of State.

Currency of contract—Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it, by giving six months' notice, should the Company fail to observe its obligations or the line be worked at a loss for not less than three half-years continuously. On the expiration of the contract Government are to take possession of the railway and all its appliances, repaying at par to the Company its capital of £1,000,000 and any further capital raised by it and paid to Government.

Power of Company to surrender contract—Nil

Terms of working—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year, and a payment of Rs 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts to be applied in payment to Government of the equivalent in rupees of interest at 3 per cent on £1,000,000, the Company's capital, at 4½ per cent on £425,000, the irredeemable debenture stock of the old Company, at 3½ per cent on the debenture stock issued and upon the principal moneys owing in respect of advances made for the Pamban branch, and 3 per cent on the net expenditure shown by the capital advance, stores and capital accounts. After deducting the equivalent in rupees of the sums referred to above, the residue, if any, to be divided between Government and the Company in the ratio of the respective capital amounts contributed by each.

Rates and fares—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 108]

Number ^{Main head 21}
_{Sub-heads (a) to (f)} SOUTH INDIAN RAILWAY SYSTEM—*contd.*21 (a) South Indian railway proper (3' 3 $\frac{1}{2}$ " gauge)—*contd.*

Statistics of working—

Calen dar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlays	Interest	Company's share of net earnings	Gauge to the State	Jah dar year	Arr iv. al 1 week	Prop rietary exp. enses per ton	Car ried year	Fare in Rs. per ton	Inven tories in Rs. per ton
1879	31,96,558	23,62,057	10,63,23	2.40	20,000		—10,00,000	18	77	47.45	16.7	118	6.20
1880	11,67,073	8,70,073	9,00,17	2.68	21,00,000		—11,00,000	19	61	41.13	1.2	119	6.93
1881	4,12,730	97,15	1' 67,75	2.77	11,00,000		—8,00,000	19	71	41.60	18.7	127	7.11
1882	4,5,69,39	27,5,713	14,02,23	1.60	11,00,000		—7,00,000	19	72	41.60	1.0	121	5.9
1883	4,0,97,614	35,6,165	13,5,331	2.61	11,00,000		—8,21,31	19	73	41.60	18.1	124	6.47
1884	3,67,51,072	41,8,010	11,9,101	2.10	21,10,171		—10,00,000	19	73	40.23	18.2	127	6.01
1885	1,97,71,100	8,10,126	1' 8,711	2.0	27,00,000		—11,00,000	19	7	41.13	18.7	129	6.25
1886	5,15,10,172	9,20,176	11,77,014	1.50	21,00,000		—11,00,000	19	51	41.13	1.0	118	5.70
1887	5,0,61,79	7,1,3,211	1' 5,672	2.11	21,10,70		—11,00,000	19	70	41.13	18.7	125	6.13
1888	5,57,01,076	50,58,653	10,11,672	2.92	21,00,000		—17,10,000	19	70	41.10	16.6	123	5.70
1889	6,0,01,679	50,10,375	17,0,111	2.93	27,00,000		—17,00,000	19	71	40.11	18.7	120	5.01
1890	7,71,101	61,2,510	2,67,70	2.76	24,00,000		—9,00,000	19	72	41.13	1.0	125	6.50
1891	7,72,11,600	70,0,716	21,5,73	3.03	21,00,000		—12,00,000	19	73	41.13	1.0	129	6.21
1892	7,82,8,761	77,11,016	27,77,00	3.5	21,10,70		—11,74,000	19	73	41.13	10.0	122	5.77
1893	7,(3),1,911	8,492,415	30,1,332	3.18	21,00,000		—21,20,000	19	74	40.10	18.1	123	4.17
1894	7,61,19,372	80,47,3	22,8,123	4.30	42,51,512	10.10	—11,00,000	19	75	9.1	27.7	128	5.69
1895	7,68,38,604	81,1,117	7,1,957	2.67	12,00,000	2	—7,00,000	19	76	40.11	18.7	126	5.70
1896	7,77,00,2	80,1,81	10,27,161	2.53	40,00,000	2	—1,00,000	19	77	40.11	18.4	214	5.35
1897	7,71,1,83	61,1,117	12,9,77	2.61	75,71,112	1.70	—1,00,000	19	78	40.25	10.0	120	4.21
1898	7,1,21,571	1,6,7,51	2,8,1,27	3.10	27,1,111	0.00	—6,00,000	19	79	40.25	18.7	21	4.21
1899	7,7,52,673	81,73,172	23,5,110	2.25	22,00,000	21.00	—7,00,000	19	80	41.13	18.7	124	5.69
1900	7,69,70,114	80,0,1,2	1,6,97,51	2.71	22,00,000	2	—7,00,000	19	81	40.11	18.7	126	5.70
1901	8,21,78,018	1,01,1,17	51,1,176	6.47	97,00,000	4.30	—4,00,000	19	82	112	0	128	5.70
1902	8,1,97,221	1,0,1,12	7,1,1,21	2.73	11,00,000	4.00	—12,00,000	19	83	112	0	128	5.70
1903	8,69,72,113	1,2,1,8,17	73,57,644	8.38	40,00,000	6.00	—12,00,000	19	84	112	0	128	5.70
1904	10,61,75,676	1,25,18,681	71,16,261	7.11	17,00,000	7.00	—15,21,000	19	85	112	0	128	5.70
1905	8,62,9,191	1,1,1,31,476	65,77,030	7.63	27,0,17	6.00	—12,00,000	19	86	112	0	128	5.70

21 (b) Karaikal-Peralam railway (3' 3 $\frac{1}{2}$ " gauge)—

The line is partly in British and partly in French territories and was constructed (by the agency of the South Indian Railway Company) with the object of placing the town and port of Karaikal in communication with the railway system of Southern India.

Details of construction—

The line is 14.65 miles long. Its construction was mentioned in 1895 and it was opened in 1898.

Permanent-way—The permanent-way consists of 11 $\frac{1}{4}$ -lb flat-footed steel rails laid on wooden and steel transverse sleepers.

Ballast—The line is ballasted with laterite.

Fencing—The line is fenced only at stations.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract—

Contract of—27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

The general conditions of the contract are as follows—

Government aid—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

Currency of contract—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

Terms of working—The line is worked for the same percentage of working expenses to gross earnings as obtains on the underlying, plus 5 per cent of the gross receipts of the line for the use of the main line rolling-stock and Rs 1,500 per annum for interest on the main line Revenue stores and Stores and Workshop buildings and machinery. If, at any time, the Company can show that the working of the railway involves an actual loss on the percentage term the Government of the French Settlements in India have to make good the loss.

Rates and fares—Same as on the South Indian railway system.

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 21
Sub heads (a) to (f) SOUTH INDIAN RAILWAY SYSTEM—*contd.*

21 (b) Karaikkal-Peralam railway (3' 3½" gauge)—*concl'd*

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs	Rs		Rs.	
1895	4,750					..
1896	59,000					
1897	593,082					
1898	7,21,665	19,733	7,855	1.09	27	60 19
1899	7,25,344	27,685	9,037	1.25	37	67 86
1900	7,29,715	24,608	9,478	1.30	32	61 48
1901	7,23,786	30,450	13,314	1.84	40	56 23
1903	7,23,786	32,786	14,619	2.02	43	55 34
1903	7,23,786	38,933	19,861	2.74	51	48 98
1904	7,23,786	36,945	—29,432	—	48	179 66
1905	7,23,786	36,922	4,406	0.61	48	88 07

TABLE II

21. (c) Pondicherry railway (3' 3½" gauge)—

The line is in French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian railway) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory

Details of construction—

The line is 7 ½ miles long. Its construction was sanctioned in 1878 and it was opened in 1879

Perrmanent-way—The line is laid with 50-lb bull headed steel rails on cast iron pot sleepers and with 41½-lb flat-footed steel rails on wooden sleepers

Ballast—The line is ballasted with stone

Fencing—The line is fenced

Curves—The sharpest curve is of 495 feet radius

Gradients—The ruling gradient is 1 in 200

Terms of contract—

The railway is worked under the following contract—

Contract of—30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line

The general conditions of the contract are as follows—

Currency of contract—The contract will be terminable by either party on giving 6 months' notice expiring on the 31st December in any year

Terms of working—The line is worked for the same percentage of gross receipts as obtains on the undertaking including the Pondicherry railway

Rates and fares—Same as on the South Indian railway

Statistics of working—

TABLE I

Calendar year	Capital outlay	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1879 to 1889}	Rs Information not available	Rs			Rs	
1890	5,68,543					
1891	5,68,543	20,106	20,107	3.54		
1892	5,68,543	15,341	15,341	2.70		
1893	5,68,543	18,014	18,014	3.17		
1894	5,68,543	27,958	18,425	3.24		
1895	5,68,543	50,328	22,711	3.99		
1896	5,68,543	39,661	17,776	3.13		
1897	5,68,543	36,592	17,169	3.02		
1898	5,68,543	31,880	14,934	2.53		
1899	5,68,543	45,305	21,627	3.80		
1900	5,68,543	59,583	23,193	4.08		
1901	5,68,543	60,174	32,736	5.69		
1902	5,68,543	70,178	37,950	6.68		
1903	5,68,543	73,416	44,258	7.78		
1904	5,68,543	60,119	33,662	5.92		
1905	5,68,543	58,414	29,827	5.25	143	49.94

TABLE II

Included with the South proper

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 21
Sub heads (a) to (f) SOUTH INDIAN RAILWAY SYSTEM—*contd.*

21 (d) Tanjore District Board railway (3' 3½" gauge)—

This railway was constructed by the agency of the South Indian Railway Company, and the money for the railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District Board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a new departure, and has opened the way for the provision of railways for which Government are unable to find the money immediately, either by the District Board itself raising the capital when the cess is sufficient for this purpose, or by giving a guarantee to a company.

Details of construction—

The open mileage (Mayavaram to Arantangi) is 99 46 miles. Construction was first sanctioned in 1890 and the line was opened through in 1903.

Permanent way—The line is laid with 41½-lb flat-footed steel and 40 3-lb. flat-footed iron rails on sal, pyinkado, west coast teak and jarrah sleepers.

Ballast—The Mayavaram-Mutupet section is ballasted with laterite and the Mutupet-Arantangi section is being ballasted with laterite over sand.

Fencing—The line is fenced only at stations.

Curves—The sharpest curve is of 1,146 feet radius.

Gradients—The ruling gradient is 1 in 200, except between Adirampatnam and Pattukkottu where it is 1 in 160.

Terms of contract—

The railway is worked under the following contract—

Contract of—22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working

The general conditions of the contract are as follows—

Government aid—Land was provided free of cost.

Terms of contract—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madras from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900 the Tanjore District Board took over the Government section and became sole owners—the purchase money, Rs 12,34,720, being treated as a loan at 4 per cent per annum. The extension of the line is being carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

Currency of contract—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on 12 months' notice, by assuming liability for any debentures which the District Board may have issued and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances this condition will not be enforced up to 31st December 1920 (Government of India No. 303 R C, dated 5th March 1898).

Terms of working—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year), plus 5 per cent of the gross receipts of the line for use of rolling-stock, and all other charges properly debitable to revenue.

Rates and fares—To be agreed upon from time to time between Government and the Company within the maxima and minima in force on the undertaking.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
1890	Rs 61,509	Rs	Rs		Rs 1,230	Rs -1,230		
1891	4,82,149				10,873	-10,873		
1892	13,84,423				37,331	-37,331		
1893	21,62,937				70,947	-70,947		
1894	23,79,123	1,63,460	62,942	2 65	1,00,701	-37,759	103	61 50
1895	21,47,438	2,42,021	93,669	3 83	95,700	-2,031	86	61 30
1896	21,49,680	2,47,772	99,361	4 06	97,861	+1,500	88	59 90
1897	21,91,834	2,66,081	1,11,496	4 47	99,159	+12,337	95	58 10
1898	24,94,905	2,46,109	77,627	3 11	99,813	-22,216	88	68 47
1899	24,97,355	2,42,016	96,798	3 88	99,845	-3,047	86	60 01
1900	25,50,776	2,32,280	97,782	3 69	1,02,731	-4,952	88	82 02
1901	32,17,931	2,90,637	1,35,765	4 23	1,35,831	-3,076	103	53 29
1902	38,18,202	3,08,879	1,46,764	3 84	1,63,157	-16,393	103	52 48
1903	45,70,190	3,90,747	2,09,167	4 58	1,97,176	+11,691	106	46 47
1904	46,32,763	5,24,490	2,61,364	5 64	2,25,868	+35,496	101	50 17
1905	47,93,090	5,86,680	2,65,302	5 61	2,21,234	+41,068	113	54 73

APPENDIX 38—*contd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 22
Sub-heads (a) to (l) SOUTHERN MAHARATTA RAILWAY SYSTEM—

Lines comprising the system.—The Southern Mahratta railway system is made up of—

	Open line	Under contra- ction or sanctioned for construction	Total
	Miles.	Miles.	Miles.
(a) Southern Mahratta railway (3' 3½" gauge)	1,012 01		1,012 01
(b) Bellary Rayadurg railway (3' 3½" gauge)		33 35	33 35
(c) Birur Shimoga railway (3' 3½" gauge)		37 92	37 92
(d) Guntakal Mysore frontier railway (3' 3½" gauge)	119 50		119 50
(e) Hindupur (Leyvantpur Mysore frontier) railway (3' 3½" gauge)	51 35		51 35
(f) Hospet Kottur railway (3' 3½" gauge)	43 06		43 06
(g) Kolhapur railway (3' 3½" gauge)	29 27		29 27
(h) Mysore Nanjangud railway (3' 3½" gauge)	15 80		15 80
(i) Mysore section (Southern Mahratta) (3' 3½" gauge)	296 22		296 22
(j) West of India Portuguese railway (3' 3½" gauge)	51 10		51 10
(k) Be uada Masulipatam railway (3' 3½" gauge)		49 50	49 50
(l) Sangli railway (3' 3½" gauge)		4 10	4 00
	Total	1,710 61	52 50
			17,311

Running powers—

Home line over foreign line —

Tadepalli to Bezwada Madras railway (North East line) for passenger and goods trains 3 00

22 (a) Southern Mahratta railway proper (3' 3½" gauge)—

Details of construction—

The open mileage of the Southern Mahratta Railway proper is 1,012 01 miles. This may be divided into (1) main line (Portuguese frontier to Tadepalli) 509 47 miles, and (2) branches, 532 07 miles. Construction was first sanctioned in 1879 and the main line was opened through in 1890.

Permanent way—The rails in use are of 11½-lb, 50 lb and 62-lb flit footed steel. The sleepers are teak, jamba and steel trough.

Ballast—The line is ballasted throughout the main line and Poona branch with stone, gravel and sand, the Harihar branch with stone, and the Bijapur branch with stone and gravel.

Fencing—The line is only partially fenced.

Curves—The sharpest curve on the main line is of 603 feet radius. The sharpest curve on the Poona branch is of 600 feet radius.

Gradients—The ruling gradient is 1 in 100, except on the Ghats, between miles 0 and 3 on the main line, where the gradient is 1 in 40.

Terms of contracts—

The Southern Mahratta railway is worked under the following contracts—

Contract of—1st June 1882—Southern Mahratta Railway Company's principal contract

28th October 1885—Contract supplemental to that of 1882, for construction and working of the West Deccan railway

31st August 1887—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Raubennur to Harihar and a line from Bellary to Guntakal

27th February 1889—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway

The general conditions of the contracts are as follows—

Government aid—Interest in sterling on share capital at 3½ per cent is guaranteed and an additional ½ per cent until 31st December 1890.

Terms of contract—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

Currency of contracts—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 40 years (*i.e.*, on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice, or on six months' notice given at any time if the Company fails to observe its obligations, or the line is worked at a loss. Upon determination of the contract by efflux of time or by notice Government have to repay to the Company the amount of the par value of the share capital paid to Government.

Power of Company to surrender contracts—The Company may determine the contracts on the 30th June in any year, by giving one year's previous notice.

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number ^{From head 22}
Sub-heads (a) to (l). SOUTHERN MAHARATTA RAILWAY SYSTEM—*contd.*22 (a) Southern Mahratta railway proper (3' 3½" gauge)—*concl.*Terms of contracts—*concl.*

Terms of working—Up to the 31st December 1890 after deducting working expenses (which may include any single item of capital expenditure not exceeding Rs 1,000, or if exceeding Rs 1,000 but not exceeding Rs 2,000, classed as a 'Minor work,' subject to a minimum charge on such account of Rs 23,000 in each half-year and a payment of Rs 10 for every mile of line open to traffic to be made half yearly to Government for supervision), the net receipts belonged to Government, unless one-fourth part of the same exceeded the extra guarantee of $\frac{1}{4}$ per cent, in which case the amount of the excess was payable to the Company. After 31st December 1890 three-fourths of the net receipts are paid to Government and one-fourth to the Company.

Rates and fares—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Percent on capital outlays	Interest	Company's share of net earnings	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
1881	Rs 2,77,721	Rs 2,17,050	Rs 18,131		Rs 13,77,196		Rs —13,95,327	50	108 51
1883	Rs 1,10,016	Rs 1,04,226	Rs 1,40,238	0 38	Rs 10,81,110		Rs —18,41,102	63	83 80
1885	Rs 1,67,620	Rs 1,31,918	Rs 4,68,392	0 70	Rs 26,47,220		Rs —21,51,823	92	69 83
1887	Rs 1,67,710	Rs 1,17	Rs 10,0 (21)	1 27	Rs 31,11,096		Rs —24,60,162	87	66 01
1888	Rs 1,61,25	Rs 1,07,016	Rs 8,57,193	1 01	Rs 31,69,70		Rs —23,04,012	83	75 70
1889	Rs 1,18,173	Rs 11,501	Rs 9,61,618	1 01	Rs 22,11,20	Rs 11,700	Rs —23,71,692	88	76 15
1890	Rs 1,52,816	Rs 11,71,095	Rs 9,11,661	0 98	Rs 31,5,611	Rs 80,036	Rs —22,54,816	85	78 19
1891	Rs 1,22,041	Rs 47,60,47	Rs 16,29,919	1 72	Rs 37,89,81	Rs 2,58,815	Rs —22,18,777	88	65 76
1892	Rs 61,10,671	Rs 41,3,107	Rs 12,17,079	1 10	Rs 21,65,511	Rs 3,41,266	Rs —21,80,778	82	68 69
1893	Rs 4,71,62	Rs 57,7,918	Rs 16,36,367	2 15	Rs 3,12,179	Rs 5,31,919	Rs —17,60,861	106	59 60
1894	Rs 4,71,706	Rs 5,0,542	Rs 18,15,567	2 12	Rs 45,87,98	Rs 5,7,556	Rs —31,26,597	108	65 44
1895	Rs 6,6,31	Rs 44,68,911	Rs 20,58,948	2 71	Rs 46,80,290	Rs 5,2,407	Rs —26,13,740	119	59 65
1896	Rs 60,04,75	Rs 67,12,230	Rs 29,11,9	3 03	Rs 44,17,740	Rs 7,20,698	Rs —29,57,479	124	56 59
1897	Rs 67,12,51	Rs 61,02,310	Rs 17,62,625	2 83	Rs 42,62,556	Rs 9,97,73	Rs —21,77,391	119	56 96
1898	Rs 7,1,670	Rs 11,1,671	Rs 15,62,414	1 4	Rs 41,10,275	Rs 5,11,277	Rs —31,52,198	93	70 82
1899	Rs 7,6,169	Rs 5,70,116	Rs 18,9,00	1 04	Rs 40,10,557	Rs 5,6,932	Rs —2,00,887	108	67 73
1900	Rs 52,0,271	Rs 60,325	Rs 24,8,766	2 32	Rs 40,02,119	Rs 8,81,807	Rs —23,00,560	119	64 63
1901	Rs 61,11,118	Rs 58,20,471	Rs 17,71,176	1 75	Rs 40,42,851	Rs 4,99,728	Rs —28,04,115	107	70 30
1902	Rs 5,1,731	Rs 11,1,66	Rs 20,09,003	2 4	Rs 40,79,615	Rs 5,91,618	Rs —22,72,902	119	64 24
1903	Rs 61,177	Rs 66,72,02	Rs 25,50,721	2 58	Rs 30,11,983	Rs 6,01,13	Rs —21,45,303	123	61 77
1904	Rs 1,7,507	Rs 71,18,48	Rs 21,97,723	2 72	Rs 41,08,930	Rs 7,20,960	Rs —21,32,168	135	63 29
1905	Rs 13,1,322	Rs 67,700	Rs 30,16,473	2 98	Rs 41,07,602	Rs 6,20,704	Rs —17,41,93	141	60 66

22 (b) Bellary-Rayadrug railway (3' 3½" gauge)—

The construction of the Bellary-Rayadrug railway by the agency of the Southern Mahratta Railway Company has been sanctioned with the object of increasing facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to the period of scarcity.

Details of construction—

The line is 33 35 miles long. It was sanctioned in 1902 and opened in 1905.

Permanent way—The permanent-way consists chiefly of flat-footed steel rails, weighing between 41½ and 39 lbs per yard, laid on teak, jambu and Australian eucalyptus sleepers.

Ballast—The ballast consists of broken stone, sand and moorum.

Fencing—The line is unfenced.

Curves—The sharpest curve is of 573 feet radius.

Gradients—The ruling gradient is 1 in 60.

Terms of contract—

The line is worked under an agreement (between the Secretary of State and the Southern Mahratta Railway Company) sanctioned under Government of India, Public Works Department (Railways) No 1114 R T, dated the 20th December 1904.

The general conditions of the agreement are as follows—

Government aid—The line is the property of Government.

Currency of agreement—The agreement is terminable at the close of any calendar half-year on twelve months' notice being given by either party.

Terms of working—Actual cost with a lump sum charge of 11½ annas per train mile for locomotive and carriage and wagon expenses and for traffic expenses connected with subordinate superintendence, train staff, lighting and general stores, clothing, printing, stationery and tickets.

Rates and fares—To be fixed from time to time by the Company with the approval of Government.

APPENDIX 38—*contd*

History of railways constructed and in progress
 [For Index see page 106]

Number ^{Main head 22}
 Sub heads (a) to (l) SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd*

22 (b) Bellary Rayadrug railway (3' 3½" gauge)—*contd*

Statistics of working—

Calendar year	Capital outlay to end of the year	TABLE I					TABLE II	
		Gross earnings	Net earnings	Percentage of net earnings on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
1905	Rs 7,70,179	Rs 17,030	Rs -2,862		Rs 14,102	Rs -16,966	Rs 19	116 81

22 (c) Birur-Shimoga railway (3' 3½" gauge)—

Details of construction—

The line is 37 92 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way—The permanent-way consists of 41½-lb flat footed steel rails on Mysore tank sleepers. The Bhadra bridge is laid with 50 lb flat-footed steel rails.

Ballast—The line is ballasted throughout with stone and sand.

Fencing—The line is unfenced except for a very short length.

Curves—The sharpest curve is of 1,500 feet radius.

Gradients—The ruling gradient is 1 in 89.

Terms of contract—

The Hindupur and Birur-Shimoga railways are worked under the following contract—

Contract of—2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows—

Government aid—The lines are the property of the Mysore State.

Currency of contract—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysore contract of the 31st August 1887 terminates. On the determination of the contract the Mysore Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway, and the working stores belonging to the railway at a valuation.

Terms of working—The working expenses of the system, excluding expenditure on New Minor Works, are divided between these railways and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs 1,000, or if exceeding Rs 1,000 but not exceeding Rs 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year), and pays the residue to the Mysore Durbar.

Rates and fares—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year	Capital outlay to end of each year	TABLE I				TABLE II	
		Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings	
1896	Rs 2,90,226	Rs	Rs			Rs	
1897	6,27,263						
1898	15,70,079						
1899	20,85,475	6,186	1,881	0 09	37	69 0	
1900	22,94,157	66,227	24,219	1 06	34	63 43	
1901	24,01,938	63,058	16,493	0 71	31	72 62	
1902	24,07,667	61,006	23,367	0 97	33	63 83	
1903	24,07,602	61,520	24,206	1 01	31	60 63	
1904	24,06,391	68,224	24,638	1 02	35	63 90	
1905	23,93,543	80,672	31,102	1 30	41	61 45	

22 (d) Guntakal-Mysore frontier railway (3' 3½" gauge)—

Details of construction—

The line is 119 50 miles long. Its construction was sanctioned in 1889 and it was opened in 1893.

Permanent way—The permanent-way consists of 41½-lb. flat-footed steel rails on steel trough sleepers.

Ballast—The line is ballasted throughout with stone.

Fencing—The line is partially fenced.

Curves—The sharpest curve has a radius of 600 feet.

Gradients—The ruling gradient is 1 in 100.

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 22
Sub heads (a) to (l) SOUTHERN MAHARATTA RAILWAY SYSTEM—*contd*22 (d) Guntakal-Mysore Frontier railway (3' 3½" gauge)—*concl'd*

Terms of contract—

The Guntakal-Mysore Frontier railway is worked under the following contract—

Contract of—21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working

The general conditions of the contract are as follows—

Government aid—The line is the property of Government

Currency of contract—The same as in the case of the Southern Mahratta railway

Power of Company to surrender contract—The same as in the case of the Southern Mahratta railway

Terms of working—The working expenses of the entire system of railways worked by the Company (including this railway), exclusive of Government supervision charges of the Southern Mahratta railway and the Mysore section, are divided between this railway and the other railways worked in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

Rates and fares—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
1893	Rs 58,39,606	Rs 1,97,874	Rs 78,955	1 35	Rs 4,67,933	-Rs 3,88,978	Rs 38	60 00
1894	58,53,114	8,18,91	1,27,874	2 18	2,34,529	-1,06,655	49	65 34
1895	58,71,739	4,39,329	1,81,657	3 09	2,34,639	-52,982	71	58 65
1896	59,00,158	4,60,992	2,10,600	3 57	2,35,666	-24,926	77	56 20
1897	59,02,498	6,38,278	2,75,983	4 68	2,36,000	+39,933	103	56 76
1898	58,98,866	4,25,702	1,82,471	2 25	2,36,026	-1,03,555	69	68 83
1899	58,98,008	8,81,829	1,28,159	2 18	2,31,996	-1,07,537	62	66 62
1900	59,00,046	4,36,116	1,57,837	2 68	2,35,960	-78,123	70	63 81
1901	59,02,593	4,47,813	1,36,659	2 32	2,36,115	-99,456	72	69 45
1902	59,04,714	4,73,072	1,74,120	2 95	2,36,107	-61,787	76	63 22
1903	59,07,192	4,96,481	1,97,075	3 44	2,36,227	-39,152	80	60 71
1904	59,14,170	7,54,378	2,73,870	4 63	2,36,372	+37,507	121	63 69
1905	59,21,993	8,07,874	3,31,829	5 65	2,36,752	+98,077	130	53 55

22 (e) Hindupur (Yesvantpur-Mysore frontier) railway (3' 3½" gauge)—

Details of construction—

The line is 51 35 miles long. Its construction was sanctioned in 1890 and it was opened in 1893.

Permanent-way—The rails on the ghat section are 50-lb flat-footed steel, State railway type, and 41½-lb flat footed steel on the remainder of the line. The sleepers are Mysore teak throughout.

Ballast—The line is ballasted throughout with stone.

Fencing—The line is fenced throughout.

Curves—The sharpest curve has a radius of 660 feet.

Gradients—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

Terms of contract—See under Birur-Shimoga railway, 22 (c).

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1892	Rs 24,11,741	Rs	Rs		Rs	
1893	24,16,186	57,635	22,708	0 93	38	60 60
1894	24,31,949	1,61,704	56,504	2 32	61	65 06
1895	24,19,698	1,92,159	79,886	3 30	72	58 43
1896	23,91,762	2,23,300	90,592	4 16	84	55 50
1897	24,79,110	2,69,527	1,18,358	4 77	101	56 09
1898	24,98,316	1,80,081	56,430	2 26	67	68 66
1899	24,98,162	1,49,363	50,578	2 02	56	66 17
1900	24,98,047	1,84,183	67,135	2 69	70	64 32
1901	24,94,729	1,97,798	60,724	2 43	74	69 30
1902	24,97,811	2,18,486	77,908	3 12	80	63 51
1903	24,97,206	2,12,695	96,159	3 85	41	60 38
1904	24,83,812	3,67,923	1,33,717	5 37	138	63 66
1905	24,83,944	3,73,993	1,54,672	6 22	140	58 59

TABLE II

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 22
Sub heads (a) to (l) SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd*

22 (f) Hospet-Kottur railway (3' 3½" gauge)—

The same remarks apply to it as are made against the Bellary-Rayadrug railway, 22 (b).

Details of construction—

The line is 43 06 miles long. Its construction was sanctioned in 1902 and it was opened in 1905.

Permanent-way—The permanent-way consists of 41½-lb flat footed steel rails, on pine, jamba and teak sleepers.

Ballast—The line is being ballasted with gravel and stone.

Fencing—The line is unfenced.

Curves—The sharpest curve is of 575 feet radius.

Gradients—The ruling gradient is 1 in 60.

Terms of contract—

The same as apply to the Bellary-Rayadrug railway, 22 (b).

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of the year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expense to earnings
1905	Rs 13,81,630	Rs 29,230	Rs -6,975		Rs 49,212	Rs -55,217	17	123 86

22 (g) Kolhapur railway (3' 3½" gauge)—

Details of construction—

The line is 29 27 miles long. Its construction was sanctioned in 1888 and it was opened in 1891.

Permanent-way—The permanent-way consists of 41½-lb flat-footed steel rails on steel trough sleepers.

Ballast—The line is ballasted throughout with gravel and sand.

Fencing—The line is unfenced except for a very short length.

Curves—There are no curves with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 100.

Terms of contract—

The Kolhapur railway is worked under the following contract—

Contract of—17th July 1891 (between the Kolhapur Durbar and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows—

Government aid—The line is the property of the Kolhapur State.

Currency of contract—The contract may be terminated, upon six months' notice, by either party.

Terms of working—The working expenses of the system, excluding Government supervision charges and New Minor Works, are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Kolhapur Durbar.

Rates and fares—The same as in force on the Southern Mahratta railway.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1889	Rs 13,59,602					
1890	21,37,699					
1891	23,16,183	58,381	20,866	0 90	60	64 26
1892	23,81,946	90,393	29,182	1 23	55	67 72
1893	23,21,657	1,88,093	49,991	2 15	78	57 67
1894	23,45,837	1,23,316	43,32	1 83	82	64 64
1895	23,69,206	1,21,147	51,006	2 15	80	57 90
1896	23,05,912	1,21,655	54,305	2 55	80	55 36
1897	23,24,837	94,630	41,931	1 80	63	55 34
1898	23,24,807	78,271	21,201	1 04	52	69 03
1899	23,24,807	99,195	33,956	1 46	66	65 74
1900	23,24,807	1,24,215	44,875	1 93	82	68 87
1901	23,24,807	1,11,114	85,750	1 54	75	68 67
1902	23,25,587	1,23,918	46,107	2 00	81	62 55
1903	23,26,188	1,21,957	48,053	2 07	80	60 60
1904	23 26 251	1,41,676	53,228	2 29	93	62 43
1905	23 26 251	1,70,404	69,432	2 98	112	59 25

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 2
Sub-heads (a) to (t) SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd*

22 (1) Mysore-Nanjangud railway (3' 3½" gauge)—

Details of construction—

The line is 15 80 miles long. It was opened in 1891

Permanent-way—The permanent-way consists of 41½-lb flat-footed steel rails, mostly on Mysore teak with a mixture of jamba sleepers

Ballast—The line is ballasted throughout with stone and sand

Fencing—The line is partially fenced

Curves—The sharpest curve has a radius of 700 feet

Gradients—The ruling gradient is 1 in 100

Terms of contract—

The Mysore-Nanjangud railway is worked under the following contract—

Contract of—11th December 1890 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

The general conditions of the contract are as follows—

Government aid—The line is the property of the Mysore State

Currency of contract—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysore contract of the 31st August 1857 terminates. On determination, the Company makes over to the Mysore Government the railway and works and pays to that Government all money's on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. The working stores, if mutually agreed upon, to be taken over by the Mysore Government at a valuation.

Term of working—After deduction of expenditure on new minor works, which is debited to each railway direct, from the total working expenses of the Company's railway system, the balance is divided between this railway and the other railways comprised in the Company's system in the proportion which the gross receipts of this railway bear to the gross receipts of such other railways, and the sum so determined, together with any single item of capital expenditure not exceeding Rs 1,000, or if exceeding Rs 1,000, but not exceeding Rs 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs 20 per mile of line open in each half year, representing the working expenses of this railway, is retained by the Company, and the residue paid to the Mysore Government.

Rates and fares—To be fixed by the Company with the approval of Government

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent. on capital outlay	Rs	Earnings per mile per week	Proportion of expenses to earnings
1872	Rs 6,02,414	Rs 16,478	Rs 6,163	1.03	21	56.60	
1873	6,18,531	23,812	14,01	2.26	43	59.59	
1874	6,07,015	37,418	12,666	2.13	47	65.65	
1875	6,09,212	39,160	16,432	2.69	49	57.98	
1876	6,09,681	40,322	17,121	2.81	50	56.45	
1877	6,34,761	33,197	14,265	2.25	42	57.41	
1878	6,49,521	31,493	10,124	1.57	40	67.85	
1879	6,46,011	16,810	5,671	0.68	21	66.26	
1880	6,53,741	50,860	11,357	1.71	38	63.20	
1881	6,50,462	26,302	7,863	1.20	35	72.22	
1882	6,16,162	29,810	10,933	1.67	36	63.48	
1883	6,56,462	31,923	12,687	1.03	39	60.26	
1884	6,57,463	38,813	14,404	2.19	47	62.95	
1885	6,56,472	41,174	18,015	2.74	51	59.22	

22 (1) Mysore Section (Southern Mahratta) (3' 3½" gauge)—

Details of construction—

The line, which connects Mysore with Hiribar, is 296 22 miles long. First sanction to its construction was given in 1877 and it was opened through in 1889.

Permanent-way—The permanent way consists of 11½-lb flat footed steel rails, with the exception of about 25 miles which are laid with iron rails. The rails are laid on Mysore teak sleepers with a small proportion of jamba and steel trough sleepers.

Ballast—The line is ballasted throughout with stone and sand

Fencing—The line is only partially fenced

Curves—The sharpest curve has a radius of 660 feet

Gradients—The ruling gradient is 1 in 100 between Hiribar and Bangalore, and 1 in 70 between Bangalore and Mysore.

Terms of contract—

The Mysore section is worked under the following contract—

Contract of—31st August 1887 (between the Secretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number ^{Main head 22}
 Sub heads (a) to (l). SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

22 (e) Mysore Section (Southern Mahratta) (3' 3½" gauge)—*concl'd*Terms of contract—*concl'd*

The general conditions of the contract are as follows—

Government aid—Guarantee of interest in sterling at 4 per cent on £1,200,000 debenture stock

Terms of contract—To meet the cost of constructing the Gubbi-Hanhar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company may raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys whatsoever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

Currency of contract—Government may determine the contract at any time, on six months' notice, should the Company fail to observe its obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta railway system be determined, then this contract will also be determined. On the termination of the contract, the Secretary of State if so required by the Company, takes over all liabilities in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

Power of Company to surrender contract—Nil

Terms of working—After deducting working expenses, (which may include any single item of capital expenditure not exceeding Rs 1,000, or if exceeding Rs 1,000 but not exceeding Rs 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs 20 per mile of line open in each half-year), the net receipts are divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent. on capital outlay	Interest	Company's share of net earnings	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
1879	Rs 7,98,213	Rs	Rs		Rs 23,960	Rs	Rs -23,960	Rs	
1880	21,37,736				68,908		-68,908		
1881	36,56,345	1,31,525	58,753	1 47	98,912		-15,159	51	59 13
1882	45,95,058	2,68,390	1,03,495	2 25	1,68,939		-65,194	68	64 11
1883	57,69,457	3,02,695	9,675	1 73	2,19,351		-1,19,676	67	67 09
1884	62,64,620	3,61,448	1,65,479	2 64	2,41,052		-75,573	67	54 22
1885	64,89,346	4,33,954	2,07,784	3 20	2,51,730		-4,916	60	52 12
1886	71,35,111	4,69,274	1,05,385	1 48	5,57,104		-4,51,719	65	59 04
1887	91,36,478	5,13,784	1,11,198	1 55	6,70,864		-5,29,616	71	71 60
1888	1,29,76,692	5,70,677	52,295	0 42	6,94,210		-6,41,915	79	76 28
1889	1,21,4,093	8,96,273	2,92,034	1 54	7,07,500	47,964	-5,93,330	72	75 23
1890	1,17,11,610	11,56,318	2,61,700	0 02	6,48,733	52,831	-4,39,864	77	77 94
1891	1,50,76,285	13,21,525	4,43,717	2 94	6,54,850	96,004	-3,07,137	86	66 50
1892	1,46,36,205	13,99,463	4,47,906	3 06	7,29,624	1,01,305	-3,83,028	89	67 92
1893	1,40,42,17	16,88,203	6,74,705	4 61	7,70,499	1,64,670	-2,60,104	109	59 92
1894	1,47,60,293	14,45,412	4,76,156	3 23	8,38,520	1,43,566	-5,05,935	94	66 99
1895	1,19,22,452	15,78,231	6,30,769	4 23	8,70,947	1,23,096	-3,63,274	103	59 72
1896	8,51,08,257	15,84,981	6,76,873	4 48	8,21,588	1,71,768	-3,16,483	103	57 29
1897	1,51,99,757	18,80,019	7,95,147	5 23	7,75,768	1,80,992	-1,61,553	122	57 54
1898	1,25,07,319	19,92,831	4,13,421	2 67	7,98,461	1,66,986	-4,92,026	90	70 32
1899	1,56,75,416	10,60,469	3,29,033	2 10	7,21,117	7,561	-4,68,915	69	68 97
1900	1,58,70,510	13,76,391	4,71,001	2 97	7,18,200	1,11,070	-3,58,069	89	65 77
1901	1,60,14,879	14,33,240	4,07,791	2 55	7,22,224	1,07,697	-4,22,150	93	71 55
1902	1,60,76,009	15,97,046	5,58,052	3 47	7,21,062	1,16,979	-2,79,059	104	65 00
1903	1,62,24,903	15,35,270	5,82,298	3 59	7,20,000	1,46,876	-2,84,598	100	63 07
1904	1,62,59,794	15,85,321	5,63,664	3 47	7,20,000	1,52,391	-3,08,721	103	64 44
1905	1,64,78,981	17,90,001	6,98,051	4 24	7,20,000	1,37,682	-1,59,631	116	61 02

22 (f) West of India Portuguese railway (3' 3½" gauge)—

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

Details of construction—

The line runs from the Portuguese frontier to Mormugao, and is 51 10 miles long. Its construction was sanctioned in 1881 and it was opened through in 1888.

Permanent-way—The permanent-way throughout consists of 62-lb flat-footed steel rails on creosoted pine, sal, teak and jumba sleepers.

Ballast.—The line is ballasted throughout with laterite and blue stone.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 720 feet radius.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 40 on the Ghat section.

APPENDIX 38—*contd**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 22
Sub heads (a) to (l) SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd*22 (j) West of India Portuguese railway (3' 3½" gauge)—*concl*

Terms of contracts—

The West of India Portuguese railway is worked under the following contracts—

Contracts of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier

21st August 1902, between the Southern Mahratta Railway Company and the West of India Portuguese Railway Company for the maintenance and working of the railway from Mormugao to the Portuguese Frontier, and the harbour at the Port of Mormugao

The general conditions of the contracts are as follows—

Government (Portuguese) aid—5 per cent per annum is guaranteed to the West of India Portuguese Railway Company on £800,000 and 6 per cent on £550,000*Currency of contracts*—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract, at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, telegraph and other works, with 10 per cent added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and the West of India Portuguese Railway Companies, which took effect from the 1st July 1902, is to continue in force for five years, subject to amendment or determination after two years on six months' notice by either party*Power of Company to surrender contract*—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company may at any time surrender the contract by giving six months' notice if the Portuguese Government fail to pay in full the interest guaranteed on its capital. On surrender of the contract the Portuguese Government are to pay to the Company in sterling an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent of such expenditure, and also purchase the rolling-stock, machinery, etc., at a valuation*Terms of working by Southern Mahratta Railway Company*—The West of India Portuguese and the Southern Mahratta railways are worked as one concern, and the expenses of the system, (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines), are divided in proportion to their gross earnings, the net earnings to be applied—in payment of a contribution sanctioned by the Portuguese Government towards a reserve fund, in payment of the guaranteed dividends on the capital of the Company, and in payment of the residue to the Portuguese Government and the Company in equal proportions

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao, and the amount to be charged for working to be the actual expenses of working and maintenance, plus 10 per cent thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese Railway Company, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899, should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision

Rates and fares—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway, the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments

Statistics of working—

TABLE I

Calendar year	Capital outlay (including outlay on Harbour works) to end of each year	Gross earnings	Net earnings	Per cent on capital outlay		
					Rs	Proportion of expenses to earnings
1890	1,63,14,170	4,75,437	67,001	0.41	136	71.24
1891	1,63,22,130	5,44,014	1,21,583	0.74	157	86.01
1892	1,63,00,901	8,74,681	11,107	0.07	109	106.01
1893	1,62,74,816	5,86,705	1,65,069	1.01	168	78.13
1894	1,63,12,813	5,43,673	1,19,332	0.73	157	56.37
1895	1,63,31,966	5,83,077	1,12,136	0.69	166	50.75
1896	1,63,80,441	2,97,176	—78,893		90	137.34
1897	1,63,40,168	1,73,722	—1,60,785		55	189.46
1898	1,62,97,448	2, 0,870	—1,10,145		65	173.60
1899	1,62,91,432	5,72,475	1,61,665	1.01	157	83.15
1900	1,63,29,362	5,33,596	—66,845		96	1.004
1901	1,63,42,023	3,63,120	—48,589		205	113.20
1902	1,63,03,793	3,54,057	51,937	0.37	133	85.51
1903	1,63,04,793	3,96,235	1,51,112	1.10	149	61.86
1904	1,63,08,793	4,59,786	1,8,414	1.33	184	62.55
1905	1,63,10,269*	4,44,519	1,77,93	1.09	157	59.97

* Approximate

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number ^{Main head 22}
^{Sub heads (a) to (f)} SOUTHERN MAHRATTA RAILWAY SYSTEM—*concl'd*

22 (1) Bezwada-Masulipatam (3' 3 $\frac{1}{2}$ " gauge)—

This railway will be 49 50 miles long It was sanctioned in 1905 and is under construction

22 (2) Sangli (3' 3 $\frac{1}{2}$ " gauge)—

This railway (Miraj Junction to Sangli town) will be 4 00 miles long Its construction from funds supplied by the Sangli Durbar was sanctioned in 1905

Number ^{Main head 23}
^{Sub head (a)} UDAIPUR-CHITOR RAILWAY (3' 3 $\frac{1}{2}$ " gauge)—

Running powers—

Home line over Foreign line —

Rajputana-Malwa railway, Berach to Chitor

Miles

1 42

The line is owned by the Udaipur State It was worked by the Bombay, Baroda and Central India railway as a temporary measure up to the 31st December 1897, since which date it has been worked by the Udaipur State

Details of construction—

This line is 67 30 miles long Its construction was sanctioned in 1894 and it was opened through in 1899.

Permanent way—The permanent-way consists of 41 $\frac{1}{2}$ lb flat-footed steel rails and on deodar sleepers

Ballast—The ballast consists of broken stone

Fencing—The line is fenced round stations only

Curves—On the Berach-Debari section the sharpest curve is of 1,146 feet radius, and on the extension from Debari to the Ahu river near Udaipur, at the 61st mile, the sharpest curve has a radius of 820 feet

Gradients—The ruling gradient is 1 in 120, except on the section Debari to Udaipur where it is 1 in 100.

Terms of contract—

The line is owned and worked by the Udaipur State

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year		Gross earnings	Net earnings	Per cent. on capital outlay
	Rs	Rs			
1893	7 000				
1894	2 70 472				
1895	18,39,850	54,702	18,778	1 40	42
1896	15,63 721	1,95 219	53,750	3 44	43
1897	15 99 040	1,21,175	42,881	2 68	39
1898	17,80,252	1 49,822	61,364	3 13	46
1899	19 89 912	2 10 540	1 04 829	5 27	62
1900	19 80,010	3,17,928	1,85,703	9 88	91
1901	20 61 858	2,22,175	94 112	4 56	63
1902	20 65 630	2 17,988	97 131	4 70	62
1903	20 66,171	1,77,817	66 446	3 21	51
1904	20 66 093	1 51,293	53 175	2 57	43
1905	20,67,464	2,07 927	1 03,552	5 00	119

TABLE II

	Earnings per mile per week	Proportion of expenses to earnings
Rs		
		65 67
		60 35
		65 19
		57 33
		50 21
		41 59
		57 65
		55 82
		62 63
		64 86
		50 19

Number ^{Main head 24}
^{Sub head (a)} BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—

Details of construction—

The line is 26 06 miles long Its construction was sanctioned in 1903 and it was opened in 1905

Permanent way—The permanent-way consists of 30 lb flat-footed steel rails on pinkado, sal and Australian jarrah wood sleepers

Ballast—The line is ballasted with broken brick

Fencing—The line is unfenced

Curves—The sharpest curve has a radius of 400 feet.

Gradients—The ruling gradient is 1 in 250

Terms of contract—

The line is worked on the terms contained in the Bengal Government Notification No 86 R, dated the 15th May 1903, under the following agreement—

Agreement—of 14th December 1897 (between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company)

The general conditions are as follows—

Aid by District Board—The District Board guarantees such an annual subsidy as will make the net profits equivalent to Rs 1,500 per annum per mile of line declared open, subject to a maximum of Rs 38,000, and allows the free use of the District road not exceeding 8 feet on one side (The Company to acquire at its own expense land necessary for stations and diversions.)

Currency of agreement—Upon the expiration of twenty-one years from the date of the order authorising the construction, by giving six months' notice, or at intervals of seven years thereafter, the District Board can exercise the right of purchase on payment of twenty times the average yearly net earnings of the four years preceding, together with a bonus of twenty per cent. thereon

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number ^{Main head 21}
^{Sub head (a)} BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—concl'd.
 Terms of contract—concl'd

Terms of working—Any surplus profits in excess of 4 per cent on share capital plus not more than 4 per cent on debenture capital are equally divided between the District Board and the Company

Rates and fares—Certain maxima have been fixed within which the Company may vary its rates.

Statistics of working—

Calendar year	TABLE I							TABLE II	
	Capital outlay to end of the year	Gross earnings	Net earnings	Per cent on capital outlay	Subsidy from District Board	Total income	Percentage of total income on capital outlay	Earnings per mile per week	Proportion of expenses to earnings.
1905	Rs 9,06,310	Rs 1,11,202	Rs 55,675	6 07	Rs —5,394	Rs 50,231	5 55	Rs 90	49 93

Number ^{Main head 25}
^{Sub head (a)} BARSI LIGHT RAILWAY (2' 6" gauge)—

Details of construction—

The mileage of the open line is 27 93 miles. Its construction was sanctioned in 1895 and it was opened in 1897. There are, in addition, 51 03 miles under construction.

Permanent way—The permanent way consists of 35 lb flat-footed steel rails on steel sleepers.

Ballast—The line is ballasted with stone and moorum.

Fencing—The line is unfenced, except for a short distance on either side of level crossings and at bridges. The Barsi Road Junction and Barsi Town stations are also fenced.

Curves—The sharpest curve has a radius of 450 feet.

Gradients—The ruling gradient is 1 in 100. There are, however, two steeper gradients, one of 1 in 89 and the other of 1 in 90.

Terms of contracts—

The Barsi Light railway is worked under the following contracts—

Contracts of—1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the line from Barsi Road Junction to Barsi town

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions

4th December 1905, supplemental to that of 26th August 1902

And Despatch from Secretary of State, No 51 Railway, dated the 8th July 1904, regarding the grant of extension of the term at the end of which the option of purchase may be exercised.

The general conditions are as follows—

Government aid—The Company is allowed the use of part of the road between Barsi Town and Barsi Road Junction stations. Land is provided free for the extensions.

Currency of contract—Government may determine the contracts on the 1st January 1941, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined, Government are to pay the Company in England in sterling an amount equal to the total paid-up capital, so far as such capital was expended with the authority of the Secretary of State.

Power of Company to surrender contracts—Nil

Terms of working—The line is worked by the owning company.

Rates and fares—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Calendar year	Capital outlay to end of each year	TABLE I			TABLE II		
		Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings.	
1895	Rs 2,357	Rs 10,06,657	Rs 2,357		Rs 115		
1896		Rs 13,43,801	Rs 1,07,778	8 00	60 00		
1897		Rs 13,42,592	Rs 1,09,321	8 15	61 15		
1898		Rs 13,56,609	Rs 1,56,118	8 63	58 63		
1899		Rs 13,56,501	Rs 1,24,140	8 93	65 90		
1900		Rs 12,99,539	Rs 1,68,238	6 13	52 69		
1901		Rs 13,18,242	Rs 1,50,275	6 42	64 81		
1902		Rs 12,59,175	Rs 1,30,604	6 71	59 13		
1903		Rs 13,18,293	Rs 1,66,934	6 93	61 09		
1904		Rs 29,13,907	Rs 2,19,478	4 96	38 39		
1905			Rs 1,34,618	4 96	195		

APPENDIX 38—*contd**History of railways constructed and in progress.*

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Number ^{Main head 26}
_{Sub head (a)}

BUKHTIARPORE-BEHAR LIGHT RAILWAY (2' 6" gauge)—

The line, which has been laid as far as possible on the District road, is 18 50 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Details of construction—

Permanent-way—The permanent-way consists of 30-lb flat-footed steel rails laid on pyinlaldo sleepers.

Ballast—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing—The line is unfenced.

Curves—The sharpest curve has a radius of 260 feet.

Gradients—The grades are easy, except at bridge approaches and up through the village of Chero where the grade is 1 in 100.

Terms of contract—

The railway has been constructed and is worked on the terms contained in Bengal Government Notification No. 100 R, dated the 25th June 1901, under the following agreement—

Agreement of—21st August 1899 (between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company).

The general conditions are as follows—

Government aid—In addition to land, which has been provided free of charge except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent per annum on the Company's share capital of Rs 8,00,000.

Currency of agreement—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, III of 1883, viz., upon the expiration of twenty one years from the date of the order of the Local Government, authorising the construction of the line, by giving six months' notice, or at intervals of 7 years thereafter, the value to be calculated at 20 years' purchase of the average net profits to the Company during the four years preceding the transaction, together with a bonus of 20 per cent thereon.

Terms of working—Any surplus profits in excess of 4 per cent on share capital, plus not more than 4 per cent on debenture capital, are equally divided between the District Board and the Company.

Rates and fares—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1903	Rs 7,47,838	Rs 35,800	Rs 15,120	2 16	Rs 74	57 77
1904	8,10,059	1,13,530	65,963	8 14	181	41 90
1905	8,11,388	88,661	35,440	4 37	92	60 03

Number ^{Main head 27}
_{Sub head (a)} CUTCH STATE RAILWAY (2' 6" gauge)—

Details of construction—

The mileage of the open line (Tuna to Anjar) is 11 86 miles. Its construction was sanctioned in 1903 and it was opened in 1905.

There are, in addition, 25 38 miles (Anjar to Bhuj) under construction.

Permanent-way—The permanent way consists of 30 lb flat-footed steel rails on half round jungle teak sleepers.

Ballast—The line is ballasted with stone.

Fencing—The line is unfenced.

Curves—The sharpest curve is of 359 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The line is owned and worked by the Cutch State.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of the year	Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
1905	Rs 4,25,731	Rs 22,867	Rs 15,864	3 72	Rs 59	29 07

APPENDIX 38—contd*History of railways constructed and in progress*

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Number Main head 28 Sub head (a) **DHOLPUR-BARI RAILWAY (2' 6" gauge)—**

Details of construction—

This line, from Dholpur on the Indian Midland railway to Bari, was sanctioned in 1905 for construction by and at the cost of the Dholpur State. It will be 19 25 miles long

Number Main head 29 Sub-head (a) **DWARA THERRIA LIGHT RAILWAY (2' 6" gauge)—**

Details of construction—

The line is 19 50 miles long Its construction was sanctioned in 1902

The work of construction on the Dwara-Maolong section, which was started by Mr G L Garth, the promoter, has been suspended on account of his death in June 1904. It will be proceeded with shortly. The work on the Maolong Therria Ghat section has not yet been authorized

Terms of contract—

The Dwara-Therria Light railway on completion is to be worked under—

Terms—Contained in the Notification issued by the Chief Commissioner of Assam under letter No 44, dated the 14th August 1902

The general conditions are as follows —

Government aid—Guarantee of interest at 4 per cent per annum for 10 years on a debenture loan of 4 lakhs of rupees, required to complete the Dwara-Maolong section Land to be provided free of cost

Currency of contract—The Secretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving two years' previous notice, on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent of the cost price of the light railway

Rates and fares—Certain maxima have been fixed Full control over charges of all kinds for the use of the railway is reserved by the Local Government

Number Main head 30 Sub head (a) **KALKA-SIMLA RAILWAY (2' 6" gauge)—**

The railway was constructed and is being worked by the Delhi-Umballa-Kalka Railway Company

Details of construction—

The line is 59 44 miles long Its construction was sanctioned in 1898 and it was opened in 1903

Permanent-way—The permanent-way consists of 41½-lb flat-footed steel rails on wooden sleepers

Ballast—The line is ballasted with stone

Fencing—The line is fenced only along the Kalka camping ground and through the skirts of the town of Kalka.

Curves—Most of the curves are compound, the limiting radius being 120 feet

Gradients—The ruling gradient is 1 in 33

Terms of contracts—

The railway is worked under the following contracts —

Contracts of—29th June 1898—(Between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction and working

13th November 1901—Contract supplemental to that of 1898 (embodying terms for change of gauge).

20th January 1903—Contract supplemental to that of 1898 (embodying terms for the advance of fund for the completion of the line)

The conditions of the contracts are as follows —

Government aid—Land provided free

Terms of contracts—The line was constructed without a guarantee at the cost of the Delhi-Umballa-Kalka Railway Company, for which purpose the Company is authorised to raise further share capital, in addition to the capital already issued for the existing undertaking, to such an amount as may be mutually agreed upon. The amount agreed upon so far is £600,000 As the actual cost has, however, exceeded this amount Government have arranged, owing to sufficient funds not being forthcoming in England, to lend the Company the requisite moneys at 4 per cent interest

Currency of contract—Government may determine the contract, on giving twelve months' notice, either on the expiration of twenty-five years from the date on which the railway has been opened for traffic throughout or on the 31st December 1928 or on the expiration of any subsequent period of ten years. Government may also determine the contract, on giving notice, if the Company fails to comply with certain obligations of the contracts. In the former case Government will pay a sum equal to twenty five times the amount of the average yearly net earnings during the five years immediately preceding the time of termination, but not exceeding by more than 50 per cent or not being less than the total capital in sterling expended In the latter case Government will pay the fair value of the railway and works

Power of Company to surrender contract—Nil

Terms of working—From the gross earnings will be deducted all charges properly debitable to revenue as working expenses (including any single item of capital expenditure not exceeding Rs 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs 15 per mile of line open in each half-year), and the balance, after payment of interest on moneys loaned from Government, will represent net earnings for shareholders

Rates and fares—Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charges for tunnels, the Company may vary such rates within the maxima and minima.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 30
Sub-head (a) KALKA-SIMLA RAILWAY (2' 6" gauge)—*concl'd*

Statistics of working—

Calendar year	TABLE I				TABLE II	
	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent. on capital outlay	Earnings per mile per week	Proportion of exports to earnings
1899	Rs 5,53,228	Rs.	Rs.		Rs.	"
1900	13,18,465					
1901	21,86,903					
1902	22,81,676					
1903	1,41,22,681	32,053	7,023	0·04	7	78·09
1904	1,68,25,512	5,90,103	2,08,240	1·21	1·91	61·75
1905	1,76,11,644	7,52,169	4,00,17	2·28	2·13	46·73

Number Main head 31
Sub-head (a) SHAHDARA (DELHI) SAHARANPUR LIGHT RAILWAY (2' 6" gauge)—

Details of construction—

The line will be 125 miles long, viz., (1) main line (Shahdara to Saharanpur) 95 miles, and (2) branch (Baraut to Meerut) 30 miles

Its construction and working by Messrs Martin and Company of Calcutta was authorized by an order contained in the Notification of the Government of the United Provinces of Agra and Oudh, No ¹⁰⁹ 157 R, dated the 18th April 1904, and a company, styled the Shahdara (Delhi)-Saharanpur Light Railway Company, was registered on the 28th November 1905 for the purpose of constructing the line which has been commenced

Terms of contract—

The line will be worked under the following agreement —

Agreement of—11th October 1905 (between the Government of the United Provinces of Agra and Oudh and Messrs Martin and Company)

The general conditions are as follows —

Government aid—Free grant of land for a single 5' 6" gauge line and for all conveniences and works

Currency of agreement—The Secretary of State will have the right to terminate the contract 21 years after the date of opening or 23 years after the date of the Government letter sanctioning the construction of the tramway, whichever is earlier, at 25 years' purchase of the annual profits to the Company for the preceding 3 years, subject to a minimum of the capital expended and a maximum of 25 per cent in excess of that sum. This option, if not exercised at the time mentioned, may be exercised at the end of successive periods of 7 years counting from that date. In the event of its being determined to construct a railway on a different gauge in place of the tramway and if the Government and the Company fail to agree that the alteration shall be made by the Company, then the Government will have the right to require the tramway at any time on 12 months' notice at 25 per cent in excess of the Company's capital expenditure

Terms of working—Whenever the net profits of the tramway shall be in excess of 4 per cent upon the paid up capital of the Company, such surplus profits shall, after setting aside such reasonable sum as the Directors of the Company may deem proper to carry forward, be equally divided between the Government and the Company

Rates and fares—Certain maxima have been fixed

Number Main head 32
Sub-head (a) TARAKESHWAR-MAGRA LIGHT RAILWAY (2' 6" gauge)—

Details of construction—

The line is 33·27 miles long, viz.—from Magra to Tarakeshwari (31·12 miles) and from Magra to Tribeni (2·15 miles). Its construction was sanctioned in 1891 and the two sections were opened in 1895 and 1901, respectively

Permanent-way—The permanent-way consists of 30-lb flat footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder of the main line on pyinkado sleepers. The Tribeni extension is laid on sal sleepers

Ballast—Sand and broken brick

Fencing—The line is partially fenced

Curves—The sharpest curve is of 716·25 feet radius

Gradients—The ruling gradient on the main line is 1 in 1,000, there are short gradients of 1 in 500 to 1 in 700 at bridge approaches, from the bridge under the East Indian railway to Magragunj station, the line is on a gradient of 1 in 350. The ruling gradient on the Tribeni extension is 1 in 500

Terms of contract—

The Tarakeshwari-Magra Light Railway is maintained and worked on the terms contained in Bengal Government Notification No 1, dated the 4th January 1896, under the following agreements —

Agreement of—16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Company)

12th March 1904 (between the Secretary of State for India and the Company).

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 106]

Number Main head 32
Sub head (a) TARAKESHWAR-MAGRA LIGHT RAILWAY (2' 6" gauge)—*concl'd*

Terms of contract—*concl'd*

The general conditions are as follows —

Government aid —Free grant of land for the Tribeni extension

Currency of Agreement —In the event of the District Board wishing to purchase the railway at the end of 21 years under the provisions of section 41 of the Bengal Tramways Act, 1883 (Bengal Code), the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay

Terms of working —The line is worked by the owning company

Rates and fares —Certain maxima have been fixed within which the Company is permitted to vary its rates

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year		Gross earnings	Net earnings	Per cent on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs					
1898		9,44,627	74,074	21,002	2.22	46	71.65
1899		9,62,446	66,168	12,192	1.27	41	81.58
1900		9,61,811	76,594	20,961	2.18	47	72.63
1901		9,72,175	83,150	19,890	2.01	51	70.23
1902		9,76,104	84,272	24,842	2.54	52	70.52
1903		10,15,987	85,546	25,350	2.50	53	70.37
1904		10,44,975	89,785	27,564	2.63	52	69.28
1905		10,46,664	86,838	21,679	2.07	50	74.81

Number Main head 33
Sub head (a) TEZPORE-BALIPARA LIGHT RAILWAY (2' 6" gauge)—

On the 31st May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line

Details of construction—

The line is 20.10 miles long Its construction was sanctioned in 1894 and it was opened in 1895

Permanent-way —The permanent-way consists of 30-lb flat-footed steel rails on timber sleepers

Ballast —The line is unballasted

Fencing —The line is fenced only at stations

Curves —In the first mile there are two curves with radii of 500 feet

Gradients —The ruling gradient between Tezapore and Rangapara is 1 in 125 and between Rangapara and Balipara 1 in 100

Terms of contract—

The Tezapore-Balipara Light railway is maintained and worked under—

Terms —contained in the Notification issued by the Chief Commissioner of Assam under letter No. 83, dated the 1st June 1895

The general conditions are as follows —

Government aid —Free use of Government land and a subsidy to the extent of Rs 5,000, up to the end of March 1909, from the Local Board at Tezapore

Currency of contract —The Secretary of State may, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent over and above such value

Terms of working —The line is worked by the owning company

Rates and fares —Certain rates and fares have been fixed

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year		Gross earnings	Net earnings	Per cent on capital outlay	Subsidy from District Board	Total income	Per cent of total income on capital outlay	Earnings per mile per week	Proportion of expenses to earnings
	Rs	Rs								
1898	4,56,927	85,735	20,157	4.41	5,000	25,157	5.51	82	76.49	
1899	4,74,177	95,157	26,156	5.52	5,000	31,156	6.57	91	72.51	
1900	4,87,240	95,981	25,797	5.29	5,000	30,797	6.32	92	73.12	
1901	4,87,240	83,640	16,898	3.47	5,000	21,898	4.49	80	79.84	
1902	4,87,240	85,012	21,651	4.48	5,000	26,651	5.47	81	74.53	
1903	4,87,240	94,742	27,739	5.67	5,000	33,739	6.71	91	70.73	
1904	4,87,240	88,463	17,291	3.54	5,000	22,291	4.57	85	80.43	
1905	4,87,240	1,03,380	27,082	5.55	5,000	32,082	6.58	99	73.80	

APPENDIX 38—*contd.**History of Railways constructed and in progress*
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Number ^{Main head 34}
^{Sub head (a)} THATON-DUYINZAIK LIGHT RAILWAY (2' 6" gauge)—

Details of construction—

The line is 7 76 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

Permanent way—The permanent-way consists of 20-lb flat-footed steel rails on Dick Kerr's patent iron and pyinkado sleepers

Ballast—The line is ballasted throughout with sand, stone and laterite

Fencing—The line is unfenced

Curves—The sharpest curve has a radius of 207 feet

Gradients—The ruling gradient is 1 in 80

Terms of contracts—

The Thaton-Duyinzauk Light railway is worked under the following—

Contract of—10th January 1884 (between the Secretary of State and the late Mr G E L Dawson of Rangoon) for construction and working

Agreement of—6th June 1896 for working the railway and a steam launch service between Moulmein and Duyinzauk

The general conditions are as follows—

Government aid—Land has been provided at a pepper-corn rent, and the proprietors receive Rs 350 per mensem for the carriage of muls between Moulmein and Thaton, *via* Duyinzauk, including both steamer and railway journeys

Currency of contract—The contract is in force for a period of 99 years. After the railway has been open for 30 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway upon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent on the value. Government may also determine the contract if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement

Terms of working—The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900

Rates and fares—Certain maxima have been fixed within which the proprietors are permitted to vary the rates

Statistics of working—Information not available

Number ^{Main head 3}
^{Sub head (a)} DARJEELING-HIMALAYAN RAILWAY (2' 0" gauge)—

Details of construction—

The line, which is laid for a great part of its length along the cart road, is 51 miles long. Its construction was sanctioned in 1879 and it was opened through in 1881

Permanent-way—The line in the plain section is laid with 41½-lb flat-footed steel rails on wooden sleepers. The hill section was laid with 41½-lb flat footed steel rails, which are being renewed with a special section steel rail, 11½ lb to a yard

Ballast—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone, except near Siliguri where sand has been used. On the hill section, where necessary, broken stone ballast has been and is being put in

Fencing—The line is unfenced

Curves—The sharpest curve has a radius of 60 feet

Gradients—The ruling gradient of the greater part of the line is about 1 in 25, from Sukhra to Ghum (summit) and thence to Darjeeling there is a length of about three fourths of a mile on grades of 1 in 22½ to 1 in 23

Terms of contract—

The railway is worked under the following contract—

Contract of—8th April 1879 (between the Secretary of State and the late Mr Franklin Prestage) for construction, maintenance and working

The general conditions of the contract are as follows—

Government aid—Government undertake to pay the Company such sum as will make up its gross receipts to two lakhs of rupees annually. Government land and the use of the existing cart road granted free of cost

Currency of contract—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land required from Government, receiving any sums due to it for permanent improvements to the road or works connected therewith. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend earning investment, with an additional bonus of 20 per cent over and above such value.

Power of Company to surrender contract.—Nil

Terms of working—After the first five years, and subject to subsequent modifications of clause 16, half the net profits of any year in excess of 5 per cent on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one moiety of the surplus profits earned in that year

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—contd.

History of railways constructed and in progress.

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Number Main head 35 Sub head (a) DARJEELING-HIMALAYAN RAILWAY (2' 0" gauge)—concl'd

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent of net earnings on capital outlay	Subsidy from Local Government	Total income	Per cent of total income on capital outlay	Earnings per mile per week.	Proportion of expenses to earnings
1880	Rs 12,32,891	Rs 48,483	Rs 34,197	2 77	Rs	Rs 34,197	2 77	Rs 82	29 45
1881	18,18,723	2,61,151	1,15,522	6 35		1,15,522	6 55	103	55 76
1882	23,56,112	3,66,174	1,21,983	3 72		1,21,983	3 72	141	66 73
1883	26,30,739	4,21,944	1,55,725	5 87		1,55,725	5 87	162	63 11
1884	27,23,230	4,35,021	1,46,765	5 39		1,46,765	5 39	167	66 26
1885	27,27,623	4,31,103	1,63,350	5 09		1,63,350	5 09	163	62 11
1886	27,32,136	4,96,176	2,41,559	8 86		2,41,559	8 86	188	51 23
1887	27,43,214	4,77,151	2,10,623	7 63		2,10,623	7 63	180	55 86
1888	27,71,926	6,14,893	2,63,327	10 22		2,88,327	10 22	233	55 93
1889	29,40,423	5,74,294	2,29,117	7 80		2,29,117	7 80	217	60 10
1890	29,52,108	5,76,436	2,92,894	7 89		2,32,894	7 89	217	59 60
1891	30,59,693	6,13,387	2,58,253	8 44		2,58,253	8 44	231	57 61
1892	31,09,079	6,37,778	2,66,647	8 57		2,66,647	8 57	210	57 46
1893	31,72,223	6,91,181	2,83,903	8 50	—J,55,418	1,28,455	4 02	239	55 41
1894	31,77,536	6,36,234	2,56,236	8 10	—29,756	2,26,530	7 13	239	59 27
1895	31,99,765	7,39,618	3,59,933	11 25	—61,740	2,98,193	9 32	279	50 92
1896	33,12,732	7,81,594	3,63,607	10 25	—62,087	2,97,580	8 98	294	53 93
1897	33,15,455	7,44,266	2,33,188	10 05	—55,929	2,77,259	8 36	281	55 28
1898	33,65,993	7,54,580	3,41,109	10 13	—59,432	2,81,677	8 47	285	54 79
1899	33,03,469	7,14,985	2,49,770	7 12	—31,933	2,14,687	6 12	270	65 07
1900	34,99,487	8,09,159	3,61,810	10 34	—64,268	2,97,572	8 0	305	55 28
1901	34,78,411	7,87,941	3,13,961	9 02	—49,971	2,63,900	7 79	297	60 17
1902	34,96,007	8,50,280	3,78,005	10 18	—67,704	3,10,301	8 88	321	54 66
1903	36,13,058	9,61,602	4,16,752	11 51	—79,226	3,37,506	8 79	363	56 65
1904	37,38,436	10 15 87	4,75,227	12 71	—97,200	3,78,027	10 11	394	53 46
1905	37,51,562	9,72,644	4,09,514	10 91	—77,671	3,31,893	8 47	367	57 70

Number Main head 36 Sub head (a) HOWRAH-AMTA LIGHT RAILWAY (2' 0" gauge)—

Details of construction—

There are 37 19 miles of open line, *viz*, main line (Telkul Ghat to Amta), 27 19 miles, and branch (Bargachia to Autpur), 10 miles. Of this two miles, from Howrah to Kudamatala, are worked over by the Howrah Shealkhala railway. In addition to the above there are 12 50 miles under construction. The construction of the main line was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of flat footed steel rails, 25 lbs to the yard on cross sleepers of pyinkado.

Ballast—The line is ballasted throughout.

Fencing—The line is unfenced.

Curves—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

Gradients—The line is practically level throughout.

Terms of contracts—

The Howrah-Amra Light railway is worked on the terms contained in the Bengal Government Notifications No 111, dated the 26th March 1895, and No 75-R, dated the 7th April 1902, under the following agreements—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company)

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah Amra)

16th August 1901 (between the District Board of Howrah and the Howrah-Amra Light Railway Company)

The general conditions are as follows—

Aid by the District Board—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs 28,000. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, a clear width of 11 feet being left for vehicular traffic.

Currency of agreement—The District Board has the power of determining the agreements after 21 years. In the event of the District Board exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Code), the value to be placed upon the railway is to be calculated by adding to the value of the whole undertaking, with all its equipments, as a dividend earning investment, a bonus of 20 per cent over and above such value.

Terms of working—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent upon the capital for the time being of the Company, surplus profits are divided between the Company and the District Board in equal proportions.

Rates and fares—Certain maxima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 36
Sub head (a) HOWRAH-AMTA LIGHT RAILWAY (2' 0" gauge)—concl.

Statistics of working—

Calendar year	Capital outlay to end of each year	Gross earnings.	Net earnings	Percent of net earnings on capital outlay	Subsidy from District Board	Total income	Percent of total income on capital outlay	TABLE II	
								Earnings per mile per week	Proportion of expenses to earnings
1898	Rs 11,34,713	Rs 1,89,519	Rs 78,916	7 02	Rs —15,062	Rs 63,818	5 68	Rs 162	5c 3d
1899	11,41,307	2,50,763	1,12,724	9 83	—27,835	81,919	7 44	163	55 02
1900	11,58,253	2,56,418	1,21,101	10 76	—30,144	92,860	7 81	172	51 16
1901	11,76,697	2,60,530	1,11,042	9 53	—26,146	87,936	7 35	171	56 21
1902	12,68,582	2,65,197	1,19,120	10 49	—29,703	13,417	6 35	178	49 84
1903	12,58,853	2,77,451	1,37,813	10 69	—31,683	10,900	8 22	186	50 33
1904	15,91,321	2,07,062	1,54,913	9 74	—35,116	11,182	7 51	170	47 82
1905	16,07,464	3,28,722	1,77,164	11 04	—78,861	1,35,602	6 62	170	46 11

Number Main head 37
Sub head (a) HOWRAH-SHEAKHALA LIGHT RAILWAY (2' 0" gauge)—

Details of construction—

The line is 19 75 miles long, viz., main line (Kadamtila to Sheakhalia), 17 38 miles, and Chanditala-Janu branch 2 37 miles. The construction of the main line was sanctioned in 1895 and it was opened in 1897.

Permanent-way—The permanent-way consists of flat-footed steel rails, 25 lbs to the yard, laid on cross sleepers & pyinkado.

Ballast—The line is ballasted throughout.

Fencing—The line is unfenced.

Curves—The sharpest curve is of 144 feet radius at Howrah town.

Gradients—The line is practically level throughout.

Terms of contracts—

The Howrah-Sheakhalia Light railway is worked on the terms contained in the Bengal Government Notification No 112, dated the 26th March 1895, under the following agreements—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramway Company)

16th July 1889 (between the District Board of Hooghly and the Bengal District Road Tramway Company)

The general conditions are as follows—

Aid by the District Board—The District Board of Hooghly have guaranteed to make up the net earnings to Rs 95 per mile constructed and opened per annum. The free use of the district road, not exceeding 6 feet and on one side only has been granted to the Company for the purpose of laying the line, provided that there shall nowhere be a less width or metalled road clear of the inner rail of the line than 16 feet.

Currency of agreement—The agreement is current for a period of 21 years. In the event of the District Board exercising, in conjunction with the Municipality of Howrah, the right of purchase conferred upon them by section 4 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway with all its equipment as then constituted, a bonus of 15 per cent over and above such value.

Terms of working—Whenever the net earnings of the Company are in excess of 4 per cent upon the capital of the Company actually paid up and expended for the time being, surplus profits are divided between the Company and the District Board of Hooghly in the proportion of two-thirds to the Company and one-third to the District Board.

Rates and fares—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent of net earnings on capital outlay	Subsidy from District Board	Total income	Per cent of total income on capital outlay	TABLE II	
								Earnings per mile per week	Proportion of expenses to earnings
1898	Rs 6,99,398	Rs 76,166	Rs 16,768	2 73	Rs 4,967	Rs 21,035	8 45	Rs 70	7 12
1899	6,09,434	73,906	21,453	3 52	—250	21,303	3 48	65	70 77
1900	6,09,446	76,019	26,824	4 40	—999	25,525	4 21	74	64 71
1901	6,09,446	75,779	23,165	3 80	1,108	24,973	3 08	77	70 52
1902	6,09,565	82,019	31,739	5 20	—550	31,180	5 12	80	61 33
1903	6 14,715	87,049	44,900	5 68	—668	31,282	5 7	85	59 55
1904	6,14,715	86,261	39,055	6 35	—2,717	36,303	5 91	84	54 72
1905	6,13,608	88,266	38,128	6 21	—2,419	35,700	5 62	86	56 80

APPENDIX 38—*concl'd**History of railways constructed and in progress*

[For Index see page 106]

Number Main head 38
Sub head (a) JORHAT (STATE) RAILWAY (2' 0" gauge)—

The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jorhat

Details of construction—

The line is 30 25 miles long, *viz.*, main line (Borghop to Titabar), 23 25 miles, and Mariani branch, 7 miles. Construction of the line was sanctioned in 1883 and the main line section was opened in 1887 and the branch in 1885.

Permanent-way—Excepting 2 51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails 80-lb to the yard, the whole line, including the section from Gosaigaon to Borghop, is laid with steel rails, 18-lb to the yard

Ballast—The line is unballasted

Fencing—Of the railway land acquired for stations and buildings that at Jorhat only is demarcated by fencing

Curves—The sharpest curve is of 480 feet radius

Gradients—Four miles on a gradient of 1 in 800.

Terms of contracts—

The line is owned and worked by the State.

Statistics of working—

TABLE I

Calendar year	Capital outlay to end of each year	Gross earnings	Net earnings	Per cent on capital outlay	Interest	Gain or loss to the State	Earnings per mile per week	Proportion of expenses to earnings
1884	Rs 4,98,339	Rs 1,161	Rs -483		Rs 17,533	Rs -18,016	Rs 40	141 60
1885	5,14,641	31,818	Rs -7,455		19,395	-26,840	25	123 14
1886	5,81,608	38,271	Rs -13,887		22,026	-31,913	28	136 28
1887	6,79,372	49,199	Rs -13,772		26,608	-40,350	32	127 99
1888	7,10,376	55,477	75		27,807	-27,732	38	90 86
1889	7,33,649	59,665	Rs -3,543		29,057	-32,600	42	105 94
1890	7,42,331	61,967	6,162	0 85	29,448	-23,286	41	90 06
1891	7,51,421	64,583	1,483	0 20	30,026	-28,543	47	97 70
1892	7,54,791	66,049	11,789	1 56	30,107	-18,318	48	82 16
1893	7,99,660	69,810	14,436	1 81	32,013	-17,577	52	79 82
1894	8,18,181	71,913	11,201	1 97	32,587	-21,386	52	84 43
1895	8,28,409	84,696	18,720	2 26	32,919	-14,199	61	77 81
1896	8,65,300	89,996	13,745	1 59	33,592	-19,847	65	84 73
1897	9,02,416	96,186	14,124	1 57	36,102	-£1,978	69	85 33
1898	9,09,445	95,958	20,135	2 21	36,179	-16,044	70	79 02
1899	9,31,626	96,488	Rs -5,916		37,228	-43,174	72	106 16
1900	9,68,613	86,693	Rs -15,664		36,341	-52,005	63	118 05
1901	9,01,038	83,184	Rs -4,169		36,218	-40,417	56	105 01
1902	8,95,693	86,441	Rs -3,655		36,237	-39,892	57	104 92
1903	9,03,343	90,710	13,594	1 51	36,408	-22,814	59	85 01
1904	9,03,781	74,293	Rs -3,840		36,260	-40,100	47	105 17
1905	9,03,441	78,600	2,458	0 27	36,450	-34,023	50	96 87

APPENDIX 39.

Statement showing the total working expenses on the principal railways in India during the year 1905 divided in proportion between coaching and goods, under gross receipts, total train-mileage and gross ton-mileage

5' 6" GAUGE LINES

Number	RAILWAY	total working expenses	GROSS RECEIPTS		TRAIN MILES.		TON MILES INCLUDING DEAD WEIGHT		
			APPENDIX 18		APPENDIX 18		APPENDIX 18		
			Item No 21	Item No 89	Item No 22	Item No 90	Item No 73	Item No 109	
			Coaching	Goods	Coaching	Goods	Coaching	Goods	
			(In lakhs)	(In lakhs)	(In lakhs)	(In thousands)	(In thousands)	(In millions)	
1 (a)	Bengal Nagpur .. .	106 24	74 27	154 57	2,143 96	3,410 11	534 96	1,475 92	
	Proportion .. .			1	2 08	1	1 59	1	2 76
2 (a) to (f)	Bombay, Baroda and Central India .. .	97 49	74 03	189 61	2,212 45	1,251 32	554 02	782 31	
	Proportion .. .			1	1 87	1 77	1	1	1 41
3 (a)	Western Bengal State .. .	61 14	42 01	69 53	1,503 34	1,079 93	367 47	534 28	
	Proportion .. .			1	1 66	1 39	1	1	1 37
4 (a) to (d)	East Indian .. .	282 15	239 28	526 94	6,988 66	9,256 78	2,077 08	5,637 35	
	Proportion .. .			1	2 20	1	1 82	1	2 74
5 (a) to (f)	Great Indian Peninsula .. .	804 00	176 27	445 98	7,122 99	8,015 61	1,733 66	3,356 83	
	Proportion .. .			1	2 53	1	1 18	1	1 94
6(a) to (c)	Madras .. .	122 89	74 18	128 43	2,133 19	3,041 19	530 78	1,218 63	
	Proportion .. .			1	1 72	1	1 18	1	2 30
8 (a) & (b)	Nizam's Guaranteed State .. .	15 72	10 85	33 28	285 64	637 80	87 32	273 50	
	Proportion .. .			1	3 07	1	2 11	1	3 13
9 (a) to (f)	North Western State .. .	350 42	199 98	429 80	7,925 04	9,466 59	1,789 38	4,253 26	
	Proportion .. .			1	2 15	1	1 19	1	2 38
10 (a) & (b)	Oudh and Rohilkhand State .. .	92 21	72 02	73 08	2,999 88	1,975 98	722 72	803 02	
	Proportion .. .			1	1 01	1 52	1	1	1 12

APPENDIX 39—concl.

Statement showing the total working expenses on the principal railways in India during the year 1905, divided in proportion between coaching and goods, under gross receipts, total train-mileage and gross ton-mileage

3' 3 $\frac{1}{2}$ " GAUGE LINES

Number	RAILWAY	Total working expenses	GROSS RECEIPTS		TRAIN MILES		TON MILS INCLUDING DEAD WEIGHT	
			APPENDIX 18		APPENDIX 18		APPENDIX 18	
			Item No 21	Item No 89	Item No 22	Item No 90	Item No 73	Item No 109
			Coaching	Goods	Coaching	Goods	Coaching	Goods
2 (g) to (m)	Rajputana Malwa	118 80	(In lakhs)	(In lakhs)	(In lakhs)	(In thousands)	(In thousands)	(In millions)
	Proportion	...		91 35	184 88	3,459 59	4,050 77	581 14
3 (b) and (c)	Eastern Bengal State	44 07		85 23	44 20	1,253 67	1,071 23	179 51
	Proportion	..		1	1 25	1 17	1	1 64
8 (c)	Hyderabad Godavari Valley	16 30		9 59	19 19	385 01	557 23	73 71
	Proportion	..		..	1	2 00	1 45	1 51
11 (c)	Assam Bengal	32 33		14 88	17 04	552 33	885 20	100 32
	Proportion	..		..	1	1 15	1 60	1 62
12 (a) & (b)	Bengal and North Western	53 31		58 68	63 61	2,448 87	2,116 45	443 25
	Proportion	..		..	1	1 08	1 16	1 21
14 (a) to (d)	Bhavnagar Gondal Junagad Porbandar	10 99		13 35	8 83	311 35	220 55	63 79
	Proportion	..	..	..	1 60	1	1 55	1 16
15 (a)	Burma	95 05		69 57	85 37	1,951 82	2,833 36	379 46
	Proportion	..	..	..	1	1 23	1	1 68
18 (a) to (c)	Jodhpur Bilawer	14 91		11 01	20 29	516 92	556 75	96 18
	Proportion	..	..	..	1	1 44	1	1 33
20 (a) & (b)	Rohilkund and Kumaon	10 13		8 60	10 42	297 67	349 75	47 65
	Proportion	..	..	..	1	1 21	1	1 48
21 (a) to (f)	South Indian	69 77		77 23	61 68	2,423 50	2,196 19	397 86
	Proportion	..	..	..	1 25	1	1 10	1
22 (a) to (j)	Southern Mahratta	69 86		43 54	68 75	1,696 09	2,603 05	271 68
	Proportion	..	..	..	1	1 58	1	1 14

APPENDIX 40.

Memorandum by the Railway Board on the results of Indian railway working, 1905-1906, and proposals for 1906-1907, as published in the Financial Statement

The results of working of Indian railways for the year 1905-1906 show larger gross receipts and larger revenue expenditure than in any previous year

The estimated net surplus Revenue, after paying all charges, including interest, is three crores three lakhs and eighty-three thousands (£2,025,600).

CAPITAL EXPENDITURE.

The Capital expenditure during the year 1905-1906 will amount to twelve crores fifty lakhs (£8,333,000), being about two crores in excess of the expenditure for the year 1904-1905

For the year 1906-1907 these figures have been largely increased. The estimate provides for spending a sum of 15 crores (£10,000,000), an increase of 20 per cent. on the provision of last year

Under the head of lines already open, including the provision of additional rolling stock, the amount expended in 1905-1906 will be 726 lakhs (£4,840,000), showing an advance of about 224 lakhs over the expenditure under the same head for the previous year

Under the same heads in 1906-1907 provision is made for 891 lakhs (£5,910,000), an increase of about 23 per cent

A comparison, showing capital expenditure for 1906-1907 and the previous five years, is contained in the following statement —

	Lines already open including additional rolling stock	LINES UNDER CONSTRUCTION		Total	Equivalent in sterling
		Started in previous years	Started in current year		
		Lakhs	Lakhs		
1901-1902 (actual expenditure)	..	3,52 58	5,09 06	25 64	8,87 28
1902-1903 (,, ,,,)	.	4,81 74	4,52 50	71 52	10,05 76
1903-1904 (,, ,,,)	.	5,58 77	3,13 68	84 62	9,57 07
1904-1905 (,, ,,,)	.	5,02 76	4,86 91	88 62	10,78 29
1905-1906 (latest grants)		7,26 63	4,81 04	42 33	12,50 00
1906-1907 (proposed grants)		8,91 09	5,38 91	70 00	15,00 00
					10,000,000

The information showing in detail how the expenditure in 1905-1906 and 1906-1907 will be distributed is contained in statement A attached to this memorandum.

Under the order of the Secretary of State a programme has been submitted to him for expenditure on railways during the next three years

This "triennial programme," as it is called, has been definitely agreed to by the Secretary of State for the year 1906-1907 and provisionally approved for the remaining two years

The year 1906-1907 is the first year this arrangement will come into operation. The object aimed at is to enable a Railway Programme, extending over a reasonable period, being made out under as fixed conditions for new railways and additions to existing ones as Indian finance will permit, and also to secure a definite continuity of railway policy, and the Railway Board have every hope that the funds required to meet the expenditure of 15 crores per annum for the next three years will be duly provided.

APPENDIX 40—*contd.*

The mileage of lines of all gauges open to traffic on 1st April 1905 was 27,728, and under construction 2,344; on 1st April 1906 there will be 28,684 open and 1,959 under construction.

At the end of the coming year there will be 1,509 miles under construction among which will be twelve new projects.

RAILWAY REVENUE ACCOUNT.

The railways of India, taken as a whole, have for a succession of years shown a balance to the credit of general revenues, after allowing for working expenses, interest on capital expended, charges for annuities in redemption of capital and miscellaneous railway expenditure. The following table shows the approximate figures for 1905-1906 compared with the actual results for the previous five years —

(Figures in rupees omitting 000)

	Gross receipts	Working expenses	Interest charges, etc	Surplus of revenue over expenditure	Equivalent in sterling
	Rs	Rs	Rs	Rs	£
<i>Actuals—</i>					
1900-1901	27,44,04	12,69,86	14,25,41	48,77	325,100
1901-1902	30,33,90	14,23,85	14,83,06	1,26,99	846,600
1902-1903	30,20,08	14,74,08	15,11,66	34,31	228,900
1903-1904	32,33,68	15,56,72	15,47,86	1,29,10	860,700
1904-1905	36,03,37	16,94,32	15,93,23	8,15,82	2,105,500
<i>Estimate—</i>					
1905-1906	36,98,72	17,44,54	16,50,35	8,03,83	2,025,600

Compared with the results of the previous year the figures for 1905-1906 show a falling off of Rs 11,99,000 (£79,900). The receipts are more by Rs 95,35,000 (£635,700), but the working expenses are higher by Rs 50,22,000 (£334,800), while interest charges, etc., have increased by Rs. 57,12,000 (£380,800).

GROSS RECEIPTS

In 1904-1905 traffic conditions were exceptionally favourable on all the larger railway systems. Pilgrim, grain and coal traffic accounted for a large increase on the East Indian railway, the recently completed irrigation works in the Punjab rendered possible the heavy export traffic in wheat via Karachi, resulting in an extraordinary increase on the North Western railway, while the earnings of the Great Indian Peninsula, Rajputana-Malwa, and Bengal-Nagpur railways were also affected by favourable crops. During the current year, while there has been a considerable falling off in grain and seed traffic on the North Western railway, and the East Indian railway earnings were practically stationary, the earnings from the other three above mentioned railways show still better results owing to further development of cotton, grain and specially coal traffic. The following are the principal differences resulting in the net increase of Rs. 95,35,000 in gross receipts —

	Rs.
<i>Increases</i>	
Bengal-Nagpur	56,65,000
Great Indian Peninsula	32,55,000
Rajputana-Malwa	30,70,000
Other railways (net)	38,93,000
	<hr/> 1,53,83,000
<i>Decrease</i>	
North Western	58,48,000
	<hr/> Net increase
	95,35,000

WORKING EXPENSES, INTEREST CHARGES, ETC.

The increase in working expenses during the year 1905-1906 is estimated to amount to Rs 50,22,000 (£334,800). This increase to a large extent is due to increased traffic on certain lines, of which the Bengal-Nagpur, Great Indian Peninsula and Rajputana-Malwa railways are the most prominent examples.

APPENDIX 40—*contd.*

These three lines will have earned more than one crore of rupees (£666,700) in excess of their earnings during the previous year, and this increase in earnings necessitate increased working expenses.

There are, however, other causes which may increase both working expenses and interest charges in the future. The increase in working expenses should be to a considerable extent temporary, the increase in interest charges, however, will be permanent.

The causes are these—

Railways in India have now to run faster trains, provide better carriages, improve the conditions under which third class passengers are carried, introduce a more elaborate system of signalling, and generally conduct their business under more up-to date methods than were in use in the past.

Some of these improvements will lead to increased revenue. Some will not, but have to be provided to meet the public demands.

The cost of many of these improvements being in the nature of renewals has to fall to a considerable extent on revenue.

During the period this raising of the standard is being carried out working expenses must rise, though in the end, under some items, more economical working should be secured.

Again it is generally admitted that there is economy in railway working in hauling heavy train loads. To enable heavy train loads to be hauled the permanent-way of railways has to be improved and girders strengthened. Most lines now, when making branches, wish to use then light main line rails in these branches and renew the main line with heavier rails.

This is a sound business arrangement, but carrying out the policy indicated means that revenue has to renew before the rail itself is nearly worn out. The result is increased debits to Revenue for a time, causing increased working expenses. The Board hope that a practical solution may be found to meet this difficulty, so that working expenses may be steadied and not liable to unnecessary fluctuations.

The results of improvement in the standard of permanent-way, carrying with it the capacity to haul heavier loads, will well repay the expenditure by ultimate reduction in cost of haulage.

NEW LINES TO BE CONSTRUCTED

The new lines, the construction of which is to be commenced during 1906-1907 are—

No	Railway	Gauge.	Probable length Miles.
(i) State, by State Agency.			
1	Bombay-Sind connection	5' 6"	295
East Bengal—			
2	Lalgola-Gheria	5' 6"	13
North-Western—			
3	Jhang-Chiniot-Sangla	5' 6"	70
4	Lodhran-Khanewal	5' 6"	55
5	Shorkot Road-Chichokri	5' 6"	130
6	Thal-Pirachinur	5' 6"	55
7	Kohat-Thal (conversion from the 2' 6" gauge, not resulting in increased open mileage)	5' 6'	62
(ii) State, by Agency of Companies:			
8	Assam-Bengal— Kulaura-Sylhet	3' 3 $\frac{1}{2}$ "	31
Burma—			
9	Dagon-Naikbin	3' 3 $\frac{1}{2}$ "	69
East India—			
10	Katwa-Azimganj-Bairarwa	5' 6"	103
(iii) From capital of Companies.			
11	Bengal-Nagpur— Vizianagram Raipur	5' 6"	310
(iv) From capital of Local Boards			
12	Kurnool Dhone	3' 3 $\frac{1}{2}$ "	32

APPENDIX 40—*contd*

OPEN LINE REQUIREMENTS

In dealing with the capital funds available for expenditure on railways, the Railway Board have given due consideration to the demands of open lines for the provision of additional facilities required by a growing trade.

For improving railway working there are demands of high importance for doubling existing lines, additional crossing stations, improved signalling, improvement of railway workshops, more staff quarters and the general provision of facilities of smaller character required to enable railways to deal more expeditiously with their traffic.

The total amount allotted during 1906-1907 to open lines, viz., 891 lakhs (£5,940,000), out of a total for the year of 1,500 lakhs (£10,000,000), has been divided between general open line requirements and additional rolling-stock approximately as follows —

	Lakhs
1906-1907	$\left\{ \begin{array}{l} \text{Open line requirements} \\ \text{Rolling stock} \end{array} \right.$
	509 382

This shows a considerable increase over 1905-1906, the figures for which were as follows —

	Lakhs
1905-1906	$\left\{ \begin{array}{l} \text{Open line requirements} \\ \text{Rolling stock} \end{array} \right.$
	452 274

ROLLING STOCK

The question of what is a sufficiency of rolling stock on a railway is one about which there is considerable difference of opinion. If railways are to be worked commercially, their interests have to be considered. It is sometimes argued that it is in the interest of the railway to be always able to carry all traffic offering at all times.

To provide for a maximum demand for transport for a short period would necessitate a very large amount of extra rolling-stock being kept to meet this exceptional demand. This rolling stock would lie idle for considerable periods and be a burden on the capital cost of the line.

In most countries of the world, especially in America where a large export grain, seeds and coal business is done, there is shortness in the supply of rolling-stock at certain times and during unusual briskness of trade.

On this important question, the Railway Board are of the opinion that Indian railways as a whole are at present below what should be the standard of equipment of rolling-stock for present requirements. Since the Board was formed they have taken steps to improve this standard and will continue to do so to meet future developments of trade.

For the year 1906-1907 the sum of three crores eighty-two lakhs has been provided for new rolling stock, being an excess of one crore eight lakhs over the provision for 1905-1906.

The stock now under indent consists of heavier engines and higher capacity vehicles. This represents a considerable increase in power of transportation beyond that indicated by the actual numbers added.

Some of the restrictions on axle loads in existing stock have also been relaxed, which has permitted existing wagons being more heavily loaded.

THIRD CLASS PASSENGER TRAFFIC.

The question of improving the comfort and convenience of third class passenger traffic is a matter the Railway Board have been devoting considerable attention to during the past year.

APPENDIX 40—*contd.*

More third class rolling-stock is undoubtedly required

Provision has, as far as practicable, been made for this during the year 1906-1907, the number sanctioned being double that supplied in 1905-1906.

The additional stock to be supplied during the ensuing year, will be of a better type than formerly. The carriages will be of a large size, better lighted and be supplied with latrine accommodation. The stock being built for renewals is also of this higher standard.

Steps will be taken during the ensuing year to develop more rapidly the system of communication between passengers and guards and drivers of trains, the system being applied to third class carriages equally with those of the higher classes.

The Board would also note that, in response to their representations, the various railway administrations are paying attention to the general convenience of third class passengers in taking tickets, avoiding crushes on platforms, and overcrowding in carriages, but much more remains to be done. The Board hope that this will induce larger numbers to travel, and thus lead to improved receipts from this valuable class of traffic.

GENERAL

During 1905 the Railway Board authorized a substantial reduction in the minimum rate for the carriage of coal. Railways, however, are moving cautiously in taking advantage of this reduction, but the Board feel sure the final result must be a large increase in the coal business and a general stimulus to industries situated far from their coal supply.

Attention is invited to statements B and C accompanying this memorandum, which contain information of interest.

APPENDIX 40—contd

STATEMENT A

Statement of anticipated capital expenditure on railways, open and under construction, for the year 1906-1907

Branch lines under rebate terms are excluded

(Figures in lakhs and decimals of lakhs)

No	RAILWAY	Grants allotted for 1905 1906	Distribution of grants during 1906 1907
A—OPEN LINES			
	I (i)—STATE, BY STATE AGENCY	R	R
1	Eastern Bengal— Main line .	(a) 125 65	38 06
2	Canal Junction Kakurgachi duplicating	0 95	
3	Kakurgachi chord	2 10	1 90
4	Kasipur Chitpur improvements	1 10	1 30
5	Kaunia Bonarpura	4 85	3 86
6	Jodhpur-Hyderabad (British section)	0 32	0 30
7	Oudh and Rohilkhand— Main line	31 16	22 00
8	Allahabad Fyzabad, Ganges Bridge	-1 48	
9	North Western— Main line	131 29	150 50
10	Peshawar Railway Reserve	-2 89	
11	Rohri Samasata doubling	65 50	59 50
12	Warora Colliery	-0 95	-0 20
13	Purchase of Kalka Simla Ry		45 00
	Total Open Lines, State, by State Agency	357 60	322 22
	I (ii)—STATE, BY AGENCY OF COMPANIES		
14	Assam Bengal	(b) 37 17	15 00
15	Bengal and North-Western— Tirhoot	15 20	20 00
16	Sakri-Jainagar		1 00
17	Bombay, Baroda and Central India— Main line	(c) 160 48	10 00
18	Palanpur Deesa	0 01	0 03
19	Rajputana Malwa	20 64	30 00
20	Rewari Phulera	7 44	2 90
21	East Indian— Main line	89 00	122 00
22	Agra Junction-Belinganj	6 00	6 00
23	Great Indian Peninsula— Main line	58 82	78 00
24	Agra Delhi chord	10 93	1 20
25	Bhopal-Itara (British section)	0 60	2 00
26	Lonavla Poona doubling		5 00
27	Madras— Nilgiri	1 90	1 80
28	North East line (East Coast)	7 00	20 00
29	Nizam's Guaranteed State— Bezwada extension	0 04	0 03
30	South Indian— Main line	17 75	27 50
31	Travancore branch (Native State section)	0 82	2 0
32	" " (British section)	0 27	1 00
33	Southern Mahratta— Guntakal Mysore Frontier	0 08	0 10
	Total Open Lines, State, by Agency of Companies	434 15	345 56

(a) Includes Rs 77 62 advanced to the Bengal Central Railway Company up to 30th June 1905, transferred from "Capital of Indian Railway Companies"

(b) Includes Rs 17 25 for purchase of Noakhali Railway

(c) Includes Rs 155 18 advanced to and overdrawn by the Company up to 31st December 1905, transferred from "Guaranteed Companies"

APPENDIX 40—*contd**Capital expenditure on railways, 1906-1907—contd.*

(Figures in lakhs and decimals of lakhs)

No	RAILWAY	Grants allotted for 1905-1906	Distribution of grants during 1906-1907
	A—OPEN LINES— <i>concl'd</i>	R	R
	II—FROM CAPITAL OF OLD GUARANTEED COMPANIES		
34	Bombay, Baroda and Central India .	(a)—118 73	
	Madras—		
35	Main line .	16 02	92 60
36	Calicut Azhilai .	0 30	0 10
	Total Open Lines, old Guaranteed Companies	—132 11	33 00
	III—FROM CAPITAL OF COMPANIES OTHER THAN OLD GUARANTEED COMPANIES		
37	Assam-Bengal .	—0 17	
38	Bengal Central .	(b) - 77 51	
	Bengal Nagpur—		
39	Main line .	6 27	17 60
40	Mianapur Jheriah .		
41	Satpura (Jubbulpur Gondia) .	82 19	100 00
42	Sini Midnapur Cuttack Cuttack .		
	Burma—		
43	Main line .	21 07	20 00
44	Hlawga Letpadan doubling .		6 00
45	Thingangyung Pegu doubling .		
	Great Indian Peninsula—		
46	Indian Midland .	10 30	22 70
47	Bhopal Dewanganj doubling .		4 00
	Rohilkhand and Kumaon—		
48	Lucknow Bareilly .	2 08	3 00
	Southern Mahiatta—		
49	Main line .	18 51	6 00
50	Mysore section .	1 53	2 31
	Total Open Lines, other Companies	67 24	190 01
	IV—FROM CAPITAL OF BRANCH LINE COMPANIES WITH FIRM GUARANTEE		
51	Hardwar-Dehra .	0 05	0 20
	Total Open Lines, Branch Line Companies	0 05	1 12

(a) Includes credit of Rs 155 48 representing advances to and overdrafts by Company up to 31st December 1905, transferred to "State Railways"

(b) Includes credit of Rs 77 62 representing advances to Company on 30th June 1905 transferred to "State Railways"

APPENDIX 40—*contd.*

Capital expenditure on railways, 1906-1907—contd

(Figures in lakhs and decimals of lakhs)

No	RAILWAY	Length	Amount of estimate or approximate cost	Outlay to end of 1904-1905	Grants allotted during 1905-1906	Distribution of grants during 1906-1907
		Miles	R	R	R	R
B—CONSTRUCTION OF LINES—concl'd						
I (ii)—STATE, BY AGENCY OF COMPANIES						
<i>Lines in Progress</i>						
72	Assam Bengal— Alhaura-Bhairab Bazar	19	12 20	..	1 77	4 87
73	Bengal and North Western— Tihoot extensions	209	114 80	40 60	37 50	24 00
74	Burma— Henzada Kyangin	66	54 59	31 07	52 06	51 00
75	Pegu Moulmein	122	112 88			
76	East Indian— Bhagalpur-Bausi	31	23 31	131 40	5 00	10 00
77	Gya-Barakar	148	206 81			
78	Hooghly Katwa	65	58 46			
79	Khurja Hapur	39	20 08			
80	Ondal Sainthia	45	43 55			
81	Shikohabad Farakhabad	66	63 83	32 00	15 00	...
82	Great Indian Peninsula— Harbour Branch	8	45 60	8 26	9 94	20 00
83	Warora Bellarpur	38	31 91			
84	Madras— Azhikal-Mangalore	77	129 05	77 64	29 85	16 00
85	South Indian— Rameswaram Extension	12	35 10	0 97	3 62	20 50
<i>New Lines</i>						
86	Assam Bengal— Kalaura-Sylhet	31	22 06	...	...	6 00
87	Burma— Daga Naukhan	69	50 00	..	..	6 00
88	East Indian— Katwa Azimganj Barharwa	103	86 37	..	...	3 00
TOTAL						
			313 60	260 64	204 14	
II—FROM CAPITAL OF OLD GUARANTEED COMPANIES						
III—FROM CAPITAL OF COMPANIES OTHER THAN OLD GUARANTEED COMPANIES						
<i>Lines in progress</i>						
89	Bengal Nagpur— Gondia Chanda	212	89 31	187	4 34	41 00
90	Pench Valley	29	16 53			
91	Purulia-Kanchi	72	39 83			
<i>New Lines</i>						
92	Bengal Nagpur— Vizianagram-Raipur	311	250 42	..	..	8 00
TOTAL						
			1 87	15 04	72 00	
IV—FROM CAPITAL OF BRANCH LINE COMPANIES WITH ITEM GUARANTEE						
V—FROM CAPITAL OF LOCAL BOARDS						
<i>Lines in Progress</i>						
93	Bezwado Masulipatam	50	24 25	...	4 00	6 00
<i>New Lines</i>						
94	Dhone Kurnool	32	7 11	—	...	7 00
TOTAL						
		...	...	4 00	13 00	

APPENDIX 40—contd

Capital expenditure on railways, 1906-1907—concl'd

(Figures in lakhs and decimals of lakhs)

No	RAILWAY.	Distribution of grants for 1906 1907.		
		R	R	
ABSTRACT BY OPEN LINES AND CONSTRUCTION				
A—CAPITAL FOR OPEN LINES				
I (i) State, by State agency	.	.	322 22	
I (ii) State, by agency of Companies	.	.	345 56	
II Old Guaranteed Companies	.	.	33 00	
III Other Companies	.	.	190 01	
IV Branch Line Companies	.	.	0 30	
		TOTAL OPEN LINES	891 09	
B—CAPITAL FOR LINES IN PROGRESS AND NEW LINES				
I (i) State, by State agency	.	.	319 77	
I (ii) State, by agency of Companies	.	.	204 14	
II Old Guaranteed Companies	.	.	72 00	
III Other Companies	.	.	13 00	
IV Branch Line Companies	.	.		
V Local Boards	.	.		
		TOTAL LINES IN PROGRESS AND NEW LINES	608 91	
		GRAND TOTAL	1500 00	
ABSTRACT SHOWING DISTRIBUTION BY FUNDS				
I—From Imperial Funds	(i) State, by State agency	{ (a) Open Lines	322 22	
		{ (b) Construction	319 77	
		Total (i)	641 99	
II—From Capital of old Guaranteed Companies	(ii) State, by agency of Companies	{ (a) Open Lines	345 56	
		{ (b) Construction	204 14	
		Total (ii)	549 70	
		TOTAL I	1191 69	
III—From Capital of Companies other than old Guaranteed Companies		{ (a) Open Lines	33 00	
		{ (b) Construction		
		Total II	33 00	
IV—From Capital of Branch Line Companies with firm Guarantee		{ (a) Open Lines	190 01	
		{ (b) Construction	72 00	
		Total III	262 01	
V—From Capital of Local Boards		{ (a) Open Lines	0 30	
		{ (b) Construction		
		Total IV	0 30	
TOTAL, I TO V		TOTAL V	13 00	
		{ (a) Open Lines	891 09	
		{ (b) Construction	608 91	
		GRAND TOTAL	1,500 00	

APPENDIX 40—contd.

STATEMENT B.

Statement showing proposed lines which are under negotiation for construction by private companies.

No	NAME OF RAILWAY	Length	Estimated cost	
	<i>Bengal—</i>	Miles	R	
1	Panchkura to Luff Point with terminal and loading arrangements for ships or steamers at the latter place	30	(a)	
	<i>Bombay—</i>			
2	Aden to Nobat Dakim (or Sheikh Othman and D thala)	(6) 40	Not stated	
3	Dholka Dhandhuka	40	Do	
4	Dhandhuka Ranpur	18	Do	This is a tramway.
5	Idar Road to Bramhatkhed	32	Do	
	<i>Eastern Bengal and Assam—</i>			
6	Borjan to Suntak	8	2,70,000	This is a tramway.
7	Mymensingh, via Netrolona, to Bara-Ari, with branch from Shambhuganj to Gauripur	36	22,16,000	
8	Singhjani, via Sherpur, to Nalitabari	25	12,39,000	
9	Sirajganj Ullapara	18	11,00,000	
	<i>Madras—</i>			
10	Tinnevelly Tiruchendur	38	20,52,000	
	<i>Punjab—</i>			
11	Rawalpindi-Murree, with extensions to Kuldana and Gherial	40	36,89,000	

(a) The share capital of the proposed company is £250,000, which, at R15=£1, is equivalent to R37,50,000

(b) Represents the distance between Aden and Nobat Dakim, via Lahej. The length of the alternative line is not stated.

APPENDIX 40—contd

STATEMENT C

Memorandum on the construction of railways

Open lines on 1st April 1906

	Miles	Miles
(i) Eastern Bengal	278 63	
North Western	3 185 03	4 670 29
Oudh and Rohilkhand	1 165 03	
Agra Delhi Chord (c)	119 64	
Bengal Central (d)	12 60	
Bengal N.W. pur	1 630 67	
Bezwada Extension (e)	23 68	
Bhopal Itarsi (British section) (e)	13 11	6,016 33
East Indian	1 662 25	
Godhra Butlam Dangda (f)	141 14	
Great Indian Peninsula	1 661 63	
Indian Midland (e)	807 13	
Madras (North East line) (g)	407 19	
Bombay Baroda and Central India	604 35	
Kadras	904 01	1,408 86
Hardwar Dehra (j)		3° 04
South Bihar (k)	78 46	
Southern Punjab (l)	423 33	630 57
Tapti Valley (f)	155 49	
(vii) A Delhi Umballa Kalka (i)		16° 30
B Tarkesar (i)		2 23
Bhopal Itarsi (Native State section) (e)	44 23	
Bhopal Ujjain (e)	115 7	
Bina Goon Baran (e)	14 63	
Kohlr Coal fields (g)	9 93	
Nagd. Ujjain (f)	313 3	700 03
Nizam's Guaranteed State	230 13	
Petlad Cambay (Aravind Parapur section) (f)	21 00	
Petlad Cambay (Tarpur Cambay section) (f)	10 02	
Jammu and Kashmir (Native State section) (i)	16 09	
Judhiana Dhuri Jakhial (l)	78 68	201 70
Rajputana Bhatinda (l)	1C7 06	
Cawnpoore-Burhwal (Metre gauge link)	(m) 79 09	
Eastern Bengal—		
District section	85 52	
Northern Behar and Bengal Dhuril sections (including the Ranaghat Krishnagar and Teesta Kurigram branches and the British section of the Santanikoti extension)		7.2 23
Assam Bengal	606 71	
Burma	740 39	
Central Mysore frontier (n)	3 340 15	
Jodhpur Hyderabad (British section) (o)	119 60	
Lucknow Bareilly (p)	222 08	
Mysore section (Southern Mahratta) (n)	237 01	
Vidarbha (q)	206 22	
Pimpri Deesa (f)	16 99	7 3 4 51
Pimpri Malwa (f)	17 29	
South Indian	1 651 65	
Southern Mahratta	1 193 13	
Tirunelly Quilon (Travancore) (British section) (r)	50 40	
Tirhoot (s)	605 45	
Tirupati District Board (r)		99 46
Ahmedabad Dhaka (f)	33 60	
Ahmedabad Parantik (f)	54 70	
Mymensingh Jamalpur Jagannathganj (t)	51 37	171 47
Nekkhal (Bengal) (u)	31 00	
A Jhilkund and Kumon	53 03	
B Dibrugarh	47 50	
C Dencor Dooars	36 10	
D Bengal and North Western	001 80	
E Bengal Dooars Extensions	116 60	1,073 15
Dooars	4 70	
Edo and Tika Margherita (v)		8 60
Bhavnagar Gondal Junagadh Orbandar	(w) 231 10	
Bikaner	215 55	
Dhrangadra (x)	20 83	
Jamnagar (x)	(y) 54 2	1,371 74
Itat or P. Jhot (z)	46 21	
Jodhpur	463 50	
Morris	60 75	
Udipur Chitor	67 30	
Birar Shimoga (n)	37 02	
Gackwar's Mehta (n)	97 03	
Hindupur (Cavantpur Mysore frontier) (n)	51 33	
Hyderabad Godavari Valley (e)	29 27	82 20
Kollapur (n)	15 80	
Mysore Nanjangud (n)	64 70	
Shorarur Cochini (g)	57 08	
Tinnevelly Quilon (Travancore) (Native State section) (r)	41 87	
Vijapur Kafol Kadi (f)	14 65	
Karakkall Peralam (r)	7 85	73 00
Pondicherry (r)	51 10	
West of India Portuguese (n)		
Fandot Light (2' 0') (l)	6 18	
Forhat (2' 0") (l)	30 23	
Forhat (2' 0") (l)	91 73	103 41
Forhat (2' 0") (l)	40 23	
Forhat (2' 0") (l)	66 21	2,0 01
Forhat (2' 0") (l)	51 00	
Forhat (2' 0") (l)	7 70	63 78
Forhat (2' 0") (l)	26 00	
Forhat (2' 0") (l)	18 60	
Forhat (2' 0") (l)	37 19	121 00
Forhat (2' 0") (l)	10 70	
Forhat (2' 0") (l)	20 10	
Larsi Light (2' 6')	21 59	
C Kalka Simla (2' 6')	59 44	120 53
Pawayan Light (2' 6') (p)	39 50	
Tarkeshwar Magra Light (2' 6")	91 40	33 27
Gackwar's Dabholi (2' 6") (f)	183 53	
Gwahor Light (2' 0') (c)	32 10	9,2 11
A Mourbhansi (2' 0") (aa)	24 62	
Parlakimedi Light (2' 0") (aa)	37 37	
Rajpipla (2' 0") (f)		83 60
B Cooch Behar (2' 0") (f)		
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(hh)		
(ii)		
(jj)		
(kk)		
(ll)		
(mm)		
(oo)		
(pp)		
(qq)		
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(ss)		
(tt)		
(uu)		
(vv)		
(ww)		
(xx)		
(yy)		
(zz)		
(aa)		
(bb)		
(cc)		
(dd)		
(ee)		
(ff)		
(gg)		
(hh)		
(ii)		
(jj)		
(kk)		

APPENDIX 40—contd

And the mileage under construction or sanctioned for construction on the same date, viz., 1st April 1905, was 3,186 80 miles as follows—

	Miles	Miles
<i>5' 6" gauge—</i>		
(i) State lines worked by the State	516 14	
(ii) State lines worked by companies	476 18	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms	154 00	
(iv) Native State lines worked by Company	139	
	—	1,178 31

Lines under construction and sanctioned on 1st March 1905			
	Miles	Miles	Miles
Eastern Bengal—			
Bankura-Chord	2 2		
Lanchia to the river Ganges (a)	10 75		
Jhanshat to Sirculia Ghast	37 20		
Norda Muitra (Southern section)—			
Naga to the crossing of the Chambal river	141 12		
(i) North Western—			
From a point 12 miles south of Qas 10			
Sukhi	5 1		
Baroda to Sherkot Dead	30 14		
Shahdara to Banjali	66 17		
Oudh and R. Khandan			
Thapri man to Jafarabad	6 50		
Ashikai-Singrao	7 27		
Bengal-Nepur—			
Dhoniad to Harishpur	2 5		
Dhoniad to Lathi & Pali	2 6		
Malwa to Nobara	3 4		
East India—			
Italgapur to Barai	31 01		
Italgapur to Dhar	1 11		
Jhansi to Nigam	2 43		
Jaipat from Howrah on the Jhara	4 0		
Branch to Chancor	1		
Tora siding	1		
Orta to Bawaliha	4 1		
Meerut to P. and 'D'	12 14		
Nasir to Khandwa	1 0		
Malwa to Barkakati	7 11		
Great Indian Canal—			
Kanpur to Aligarh	5 21		
Aligarh to Allahabad	1 3		
Aligarh to Belgaum	5 20		
Indian 3 ft. (a)			
1 mi. w. of Agra-Delhi road	2 21		
Madras(Nellore-Kanchi)—			
Kanchipuram to Panipat-Puri	5		
Salem-Antur (b)	2 10		
(ii) Southern Punjab Extension—			
Italia to Manjog (Ganj)			
(iv) Central Canals (Tariq-i-Canales) (c)—			
Canales to Canals (i) (d)			

3' 3½" gauge—

	Miles
(v) State lines worked by the State	301 87
(vi) State lines worked by companies	601 31
(vii) District Boards' lines	5 53
(viii) Assisted companies' lines—	
	Miles
A Subsidized by the Government of India	118 00
B Receiving land only from Government	116 01
	—
(ix) Native State lines worked by companies	72 85
	—
	1,263 33

Special (2' 6" and 3' 0") gauges—

	Miles
(x) State lines worked by the State	6 80
(xi) State lines worked by companies	325 52
(xii) Assisted companies' lines—	
	Miles
A Subsidized by District Boards	105 50
B Receiving land only from Government	214 66
	—
(xiii) Native State lines—	320 16
A Worked by Native States	11 86
B Worked by companies	68 60
C Worked by State railway agency	22 02
	—
	102 49
	—
	754 90
	TOTAL 3,186 80

There was thus a grand total of railways completed and in hand, on the 1st April 1905, of miles 30,914 48

(v) Eastern Bengal—			
Gorakhpur to Gorakhpur (Bihar) (e)			
Gorakhpur to Chanda (2 6")	121 6		
Gorakhpur to Buxar	41		
Buxar to Patna			
Patna to Muzaffarpur (b)	1 70		
Muzaffarpur	4 15		
Muzaffarpur to Malwa			
Muzaffarpur to P. & 'D'	200 12		
(vi) Central—			
Delhi to Shahjahanpur	1 12		
Tangail to Dhaka (2 6")	2 78		
Tangail to Dhaka (3 ft.)	0 45		
Tangail to Dacca	1 12		
Dacca to Mymensingh	2 43		
(vii) Bihar—			
Allahabad to Benares	1 12		
Benares to Gaya	3 2		
Gaya to Ranchi	1 61		
Ranchi to Dhanbad	2 10		
Dhanbad to Asansol	1 12		
Asansol to Barabati	2 43		
Barabati to Cuttack	1 12		
Cuttack to Berhampur	2 43		
Berhampur to Madras	1 12		
Berhampur to Gopalpur	2 43		
Gopalpur to Madras	1 12		
Gopalpur to Karaikal	2 43		
(viii) Madras—			
Chittagong to Barisal	2 10		
Barisal to Dacca	1 12		
Dacca to Mysore	4 0		
Mysore to Bangalore	2 10		
Bangalore to Mysore	1 12		
Mysore to Bangalore	2 43		
Bangalore to Madras	1 12		
(ix) Bengal—			
Patna to S. Wal Madras	72 85		
(x) Jullundur—			
Jullundur to Jullundur (British frontier) (c)			
Jullundur to the British frontier			
(xi) Bihar—			
Gorakhpur Chanda (2 6")—			
Gorakhpur to Chanda (2 6")	11 6		
Chanda (2 6") to Muzaffarpur (b)	63 5		
Jullundur G. I. L. to Muzaffarpur (b)	21 45		
Jullundur G. I. L. to Bara	21 12		
Bara to Buxar	1 12		
Buxar to Varanasi	2 43		
Varanasi to Mandi Bahadur	2 43		
Mandi Bahadur to Mysore	1 12		
Mysore to Bangalore	2 43		
(xii) Bihar—			
Howrah-Kurta P. (2 6")—			
Antpur to C. M. P. (2 6")	1 12		
Antpur to Rajnagar (2 6")—	3 20		
Muzaffarpur to Kotriuli	2 43		
Amritsar-Kotriuli to Kotriuli	6 00		
Kotriuli to Krishnagar	2 43		
Krishnagar to Krishnagar (2 6")	2 43		
Krishnagar to Barabati			
Barabati to Cuttack	1 12		
Cuttack to Berhampur	2 43		
Berhampur to Madras	1 12		
(xiii) Bihar—			
Cuttack (2 6")—			
Anjan to Tinsa			
Gawali Light (2 6")—			
Sabalgiri to G. I. L.			
G. I. L. to Muzaffarpur (2 6")—			
Muzaffarpur to Meerut	30 00		
Meerut to Saharanpur	30 00		
Saharanpur to Saharanpur	1 00		
(A) Cuttack (2 6")—			
Anjan to Tinsa			
Gawali Light (2 6")—			
Sabalgiri to G. I. L.			
G. I. L. to Muzaffarpur (2 6")—			
Muzaffarpur to the British frontier (c)			
Muzaffarpur to the British frontier (c)	22 02		

(a) Constructed but not worked.

(b) Commencement of work not authorised.

(c) Commencement of work not authorised and question of gauge not finally settled.

(d) Completion deferred.

APPENDIX 40—contd

New lines authorised

	Miles	Miles	Miles
(i) Nagpur-Matra— Crossing of the Chambal river to Mattra Kotish to Baran North Western— Fachha Garhi to mile 3	200.6 40.09 242.45 23.00	242.45 23.00	26.46
(ii) Agra-Delhi Chord— Kosi to Sanket Bengal-Nagpur— Branch line near Khanoodh East Indian— As a direct access Batachuck to Foddepur Hoochly to Howrah Chord line between the East Indian and Oudh and Rohilkhand State railways near Moghal Sarai	6.00 1.97 1.75 4.70 6.23 1.10	6.00 1.97 1.75 4.70 72.63 1.10	60.67
(iii) Amritsar-Patti	—	—	6.85
(iv) Eastern Bengal— Forbesganj to the Nepal Frontier	—	6.50	—
(v) Assam Bengal— Akhaura to Ashuganj Burma— Thamalang to Malagaon	19.00 6.00	25.70	—
(vi) Debwada-Masulipatam	—	4.80	—
(vii) Dibrusadiya— Talap to Shalkwaghat	—	8.20	—
(viii) Morri— Stone Quarry branch (a) Gachwar & Nehansari— Chauhama to Rechraji Mawund Road to Haris Sangli— Miraj to Sangli Town	2.75 17.77 21.20 39.47 4.00	2.75 42.47	—
(ix) Parolla-Panchi (2' 6")	—	72.96	—
(x) Cutch (2' 6")— Anjar to Bhuj Dholpur-Bari (2' 6")	25.35 19.25	44.63	—

Lines opened or likely to be opened

	Miles	Miles	Miles
(xi) Eastern Bengal— Janchooria to the river Ganges Panjabhat to Lalgaon Ghat	6.00 107.55	103.85 167.14	—
North Western— Sircind Junction to Nasik	63.29	—	—
Agra-Delhi Chord— Kosi to Sanket	6.00	—	—
Bengal-Nagpur— Mohuda to Malkera	6.70 1.11	49.17 37.41	—
East Indian— Firmapur Chord Mainpuri to Farukhabad	36.30	—	—
(xii) Southern Punjab Extension— MacLeodganj to Ferozepore City Ferozepore Cantonment to Ludhiana	70.89 5.90	157.78	—
(xiii) Jaipur— Sanganer to Nawal	32.25	—	—
(xiv) Eastern Bengal— Honarpura to Kaunia Golokganj to Kokrajhar	44.47 35.37	79.84	—
Bellary Payadrug Hospital Kottur Malipatna Malwa— Phuleria to Naraul	37.25 43.03	—	—
Tirhoot— Balrampur to Dardkatinganj Bhagalpur to Bhagalpur Ghat Bettiah to Bhikun Thorco	65.05 4.79 41.25	100.63 100.63	293.13
(xv) Rohilkund and Kumaon— Barilly to Soron Bengal and North Western— Barhali to Tulsipur Galusara to Jarwa	66.00 12.05 1.60	—	—
(xvi) Jaipur— Sanganer to Nawal	32.25	—	—
(xvii) Jubbulpore-Gondia Extension (2' 6")—	16.00 1.30 2.43	69.75	—
(xviii) Darsi Light (2' 6")— Darsi Town to Kuslamb	—	7.00	—
(xix) Cutch (2' 6")— Anjar to Tuna	—	11.56	—

During 1905-1906, i.e., from 1st April 1905 to the 31st March 1906, 621.69 miles of new railway have been authorised as follows —

	Miles	Miles
5' 6" gauge—	—	—
(i) State lines worked by the State	265.46	—
(ii) State lines worked by companies	89.67	—
(iii) Branch line companies' railways assisted by Government under "Robato" terms	23.83	—
	372.95	—
3' 6" gauge—	—	—
(iv) State lines worked by the State	6.50	—
(v) State lines worked by companies	25.70	—
(vi) District Boards lines	45.70	—
(vii) Assisted company's lines subsidised by Local Governments	8.50	—
(viii) Native State lines—	—	—
A Worked by Native States	2.75	Miles
B Worked by companies	12.17	—
	45.22	131.62
Special (2' 6" and 2' 0") gauges—	—	—
(ix) State lines worked by companies	72.26	—
(x) Native State lines worked by Native States	41.63	—
	TOTAL	621.69

And 935.83 miles have been or are likely to be opened to public traffic as follows —

	Miles	Miles
5' 6" gauge—	—	—
(xi) State lines worked by the State	187.14	—
(xii) State lines worked by companies	49.17	—
(xiii) Branch line companies' railways assisted by Government under "Robato" terms	1.278	389.00
3' 6" gauge—	—	—
(xiv) State lines worked by the State	70.84	—
(xv) State lines worked by companies	283.13	—
(xvi) Assisted companies' lines—	—	—
A Subsidised by the Government of India	56.00	Miles
B Receiving land only from Government	35.61	—
(xvii) Native State lines worked by companies	91.61	—
	32.25	687.13
Special (2' 6" and 2' 0") gauges—	—	—
(xviii) State lines worked by companies	60.75	—
(xix) Assisted companies' lines receiving land only from Government	7.00	—
(xx) Native State lines worked by companies	11.56	—
	TOTAL	621.69

(*) This branch is on the 2' 6" gauge
Correction of mileage

APPENDIX 40—contd

Lines under construction and sanctioned on 31st March 1906

		Miles	Miles	Miles
(i) North Western—	Eastern Bengal— Kankurgachi Chord Nagda Mutttra— Nagda to Mutttra Kotah to Baran	2 25 313 09 40 00 103 14 +55 35	383 09 181 40	6' 5' 23
	Kachha Garhi to mile 23 Sargoda to Shorkot Road Shondara to Sangla	23 00 +55 35		
	Oudh and Rohilkhand— Phaphamau to Zafarabad	57 50		
	Azhikai Mangalore Bengal Nagpur—	77 27 25 61 2 78 1 97	28 69	
	East Indian— Agra direct access Bhagalpur to Bansi Barabukh to Sodepur	1 78 31 04 4 50		
	Chord line between the East Indian and Oudh and Rohilkhand State railway near Moghal Sarai	1 19		
	Hoogly to Katwa Khurja to Hapur	65 20 39 49	315 34	607 07
	Mile 170 ft from Howrah on the Jharia branch to Chandore	4 16		
	Ondal to Sainthia Manpur to Dhanbad	44 93 121 49		
	Nagri to Kasundra Great Indian Peninsula— Kuria to Muzgaon Mahim (Muk) Warora to Bellarpur	1 59 6 51 1 33 37 89	45 42	
	Indian Midland— Portion of Agra Balinganj branch	2 24		
	Madras (North East line)— Koratkuppital to Basin Road	0 85 36 00		
(ii)	Salem Attur (a)	26 85		
(iv)	Petlad Cambay (Tarampur Cambay section)— Cambay to Cambay Bandar	1 39		
(v)	Eastern Bengal— Forbesganj to the Nepal Frontier Kathbar to Godagari Kokrahar to the Brahmaputra river opposite Gauhati	6 50 105 00 116 25	227 75	
	Assam Bengal— Akhraura to Ashuganj	10 00		
	Burma— Thamng to Malagaon	6 70		
	Burma Extensions— Henzada to Kyanglin Pegu to Martaban (a)	65 66 121 27	160 93	
	Nilgiri— Coonoor to Ootacamund	11 50	350 54	
	South Indian— Mandapam to Rameswaram Temple Tangachimadam to Port Amphill Tiruppachettai to Sivaganga	10 13 1 71 0 00	20 83	
	Tirhoot— Mansi to Bhaptishi Mankatagan to Bagaha Bahraka to Murliganj	60 37 26 60 18 61	10 58	
	Dezwada Masulipatam— Tajor, District Board— Adirampattinam Salt siding Arantangi Quarry branch Thamblikkottai Salt siding	45 90 1 00 3 00 0 03	51 43	
	A Bohiskund and Kumaon— Lalkua to Kashipur Moradbad to Bannagar	45 00 47 00	92 00	
	B Dibrin Sadiya— C Bengal and North Western— Dhaxonda to Maharriganj Gorakhpur to Bagaha Savan to Thawa	8 50 3 20 60 94 17 00	81 84	
	A Morvi— Stone Quarry branch (a) Gaekwar's Mehsana— Chausama to Bechraji Manund Road to Hari	2 75 17 27 21 20	38 47	
	D Jalpur— Naval to Sival Madhopur Sangli— Miraj to Sangli Town	40 60 4 00	63 07	
(x)	Jullundur Kapurthala Sultanpur (British section) (c)— Jullundur to the British frontier	6 80		
	Gondia-Chanda (2' 6")— (a)	149 05 63 75	212 40	
	Chhindwara to Burcooie Kursadeyi to Sirgora Neinpur to Mandla	21 36 7 76 +32 14	61 26	345 92
	Purnia Ranchi (2' 6")— Howrah Amra Light (2' 0")— Autpur to Champadanga (a) Autpur to Rejbhulat (a)	72 26 9 00 3 50		12 60
	B Barsi Light (2' 6")— Barsi Road Jn to Pandarpur Kusumtib to Tadwala Dwara Theria L. ht (2' 6")— Dwara to Maolong (a) Maolong to Theria Ghat (a)	30 67 10 70 18 50 6 00	50 37 10 50	207 00
	C Matheran (2' 0")— Neral to Matheran Shahdara (Delhi) Saharanpur Light (2' 6")— Baraut to Meerut Shahdara to Saharanpur	12 79 30 00 65 00	1 25 00	
	A Catch (2' 6")— Anjar to Bhuj Dholpur Bari (2' 6")— B Gwalior Light (2' 0")— C Sabalgarh to Shisupur	25 38 10 25	44 03	
	Jullundur Kapurthala Sultanpur (Native State section)— Sultanpur to the British Frontier (c)	68 60	22 02	

(a) Commencement of work not authorized
(b) This branch is on the 2' 6" gauge
(c) Commencement of work not authorized and question of gauge not finally settled† Made up as follows—
Completed and in hand at the beginning of 1905-06
Sanctioned during 1905-06

And the mileage under construction or sanctioned for construction on the 31st March 1906 will be 2,766 54 miles, made up as follows—

	Miles	Miles	Miles
5' 6" gauge—			
(i) State lines worked by the State	625 22		
(ii) State lines worked by companies	507 07		
(iii) Branch line companies' railways assisted by Government under "Rebate" terms	26 85		
(iv) Native State lines worked by companies	1 39		
			1,160 53

	Miles	Miles	Miles
3' 3 1/2" gauge—			
(v) State lines worked by the State	227 75		
(vi) State lines worked by companies	350 54		
(vii) District Boards' lines	51 43		
(viii) Assisted companies lines—			
A Subsidized by the Government of India	92 00		
B Subsidized by Local Government	8 50		
C Receiving land only from Government	81 84		
			182 34

	Miles	Miles	Miles
(ix) Native State lines—			
A Worked by Native States	2 75		
B Worked by companies	83 07		
			85 82

	Miles	Miles	Miles
Special (2' 6" and 2' 0") gauges—			
(x) State lines worked by the State	6 80		
(xi) State lines worked by companies	345 92		
(xii) Assisted companies lines—			
A Subsidized by District Boards	12 50		
B Receiving land only from Government	207 66		
			220 16

	Miles	Miles	Miles
(xiii) Native State lines—			
A Worked by Native States	44 63		
B Worked by companies	68 60		
C Worked by State railway agency	22 02		
			135 25
			708 13

TOTAL 2,766 54

Making a grand total of railways completed and in hand, at the commencement of 1906-1907 of miles 31,450 35

And showing, after allowing for lines abandoned and corrections of mileage, an advance on the previous year of miles 535 87

(d) Completion deferred

* Correction of mileage

Mile 51 48

621 60

31 536 17

9 47

31 545 64

2 29

95 90

31,450 35

56

Add—
Increase in mileage of the Mandla branch of the Jubulpur Gondia extensionDeduct—
Madura District Light railway abandoned

Net decrease due to corrections of mileage

APPENDIX 40—*concl'd*

It is expected that the following lengths of unfinished line will be opened for public traffic in 1906-1907 —

	Miles	Miles
<i>5' 6' gauge—</i>		
(i) State lines worked by the State	319 76	
(ii) State lines worked by companies	348 65	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms	26 85	
		695 26

<i>3' 3$\frac{1}{2}$" gauge—</i>	
(iv) State lines worked by companies	. 105 58
(v) Assisted companies' lines—	Miles
A Subsidized by the Government of India	92 00
B Receiving land only from Government	60 94
	— 152 94
	— 258 52

<i>Special (2' 0" and 2' 0") gauges—</i>	
(vi) Assisted companies lines receiving land only from Government	1970
TOTAL	973 48

Leaving the undermentioned lines for completion in 1907-1908 or later —

	Miles.	Miles
<i>5' 6" gauge—</i>		
(vii) State lines worked by the State	405 46	
(viii) State lines worked by companies	158 42	
(ix) Native State lines worked by companies	1 39	
		465 27

<i>S' 3½' gauge—</i>	
(x) State lines worked by the State	227 75
(xi) State lines worked by companies	214 96
(xii) District Boards' lines	51 43
 (xiii) Assisted companies lines—	Miles
A Subsidized by Local Govern- ments	8 50
B Receiving land only from Government	20 00
	<hr/>
	29 40
 (xiv) Native State lines—	
A Worked by Native States	2 75
B Worked by companies	83 07
	<hr/>
	85 82
	<hr/>
	039 3

		Miles	Miles	Miles
(i)	Eastern Bengal— Nagda Muttra— North Western—	Kankurgachi Chord Nagda to Morak " "	22. 101 50 103 14 65 30	22. 101 50 168 40 67 60 77 27 25 64 310 70
(ii)	Azhikal Mangalore Bengal Nagpur— East Indian—	Dhodjudh to Harlarpur Kharja to Haripar Manpur to Dhanbad Ondal to Santha	77 27 33 40 121 19 44 03	77 27 25 64 319 63 37 60
(iii)	Great Indian Peninsula— Indian Midland— Amritsar Patti	Warora to Dallarpur Portion of the Agra Billinganji branch " "	33 40 22 21	319 63 26 65
(iv)	Tirhoot—	" "	60 37 16 60 18 01	10 58
(v)	A	" "	45 00 47 00	9 00 60 94
(vi)	Barsi Light (2' 6")— Kuslamb to Tadwala	" "	" "	10 70
(vii)	Nagda Muttra— North Western— Bengal Nagpur— East Indian—	Norak to Muttra Kotah to Buran Kacha Garhi to mile 3 Dhodjudh to Parthadil Branch line near Khanoodih Agra direct access Bhagalpur to Basni	212 41 40 03 23 00 2 28 1 07 1 70 31 01 4 60	252 40 30 44 4 23 168 43 7 83 0 83 36 00
(viii)	Sarai Great Indian Peninsula— Madras (North E. lat line)— Salem Attur (a)	Hongjhy to Kutwa Mile 1 03 from Howrah on the Jharia branch to Chandore Nigri to Kusunda Kurla to Mazagon Malikhunk Korrikuppetti to Basin Fead	1 10 63 23 4 16 1 60 6 61 1 23 0 83	168 43 168 43
(ix)	Petted Cambay (Tatrapur Cambay section)— Cambay to Cambay Bandar	Cambay to Cambay Bandar	36 00	1 30
(x)	Eastern Bengal— Assam Bengal— Burma— Burma Fusions— Nilgiri— South Indian— Bezwada Unsukupram Tanjore District Board—	Forbesganj to the Nepal Frontier Kathiar to Todapari Kokrahat to the Brahmaputra river opposite Gaubati Akhaura to Ashurnaj Thumnaung to Malsgoan Henzada to Kyangin Pegu to Martaban (a) Coonoor to Ootacamund Mandapam to Pameewaram Temple Tangachimadam to Port Amphill Tiruppathettai to Sivanguna Unsukupram Tanjore District Board—	1 50 10 00 116 50 10 00 0 00 1 12 27 1 12 27 11 50 10 12 1 71 9 00 4 60 1 07 3 00 0 63	227 70 244 00 51 43 8 50 20 00 2 75 63 07
(xi)	R	Talap to Shantwoshat	3 03 17 00	8 50
(xii)	A Morvi— Gackwari's Neibans— Jaipur— Sangli—	Stone Quarry branch Chrusma to Neibari Masund Road to Harij Sawai to Sawai Madhopur Miraj to Sangli Town	0 00 17 27 21 03 40 00 4 00	20 00
(xiii)	Jullundur Kapurthala Sultanpur (British section)— Jullundur to the British Frontier (b)	" "	6 60	
(xiv)	Gondia (bands (2' 6")— B	Gondia to Chandi (a) " " " " " " " "	148 61 63 75 21 26 7 78 3 11 72 20	212 30 61 23 345 02
(xv)	A	Autupur to Krishnabat (a)	9 00 9 50	12 50
(xvi)	Barsi Light (2' 6")— Dwara Thheria Light (2' 6") B	Barsi Road Junction to Pandharpur Dwara to Maolong (c) Maolong to Therria Ghat (a) Matheran (2' 6")— Aeril to Matheran Shirdiara (Delhi) Siharapat Light (2' 6")— Baraut to Veerut Shirdi ra to Saharanpur	30 67 13 00 6 00 12 70 30 00 95 00	315 02 187 00
(xvii)	Cutch (2' 6")— A	Anjar to Bhuj	10 50	41 63
(xviii)	B	Dholpur Buri (2' 6")— Gwalior Light (2' 6")— C	10 25	68 60

(a) Commencement of work not authorized

(b) Commencement of work not authorized and question of gauge not finally settled
(c) Completion deferred

(c) Completion deferred

APPENDIX 41.

Constitution of a Railway Board, and abolition of the Public Works Department (Railway Branch) of the Government of India.

No 256 G

GOVERNMENT OF INDIA.

P U B L I C W O R K S D E P A R T M E N T

GENERAL

Calcutta, the 18th February 1905

Read—

P W D Resolution No 3396 G , dated the 23rd December 1897.

P W D Resolution No 293 G , dated the 1st March 1900

P. W D Despatch No 2 Ry , dated the 7th January 1904, to the Secretary of State for India

Despatch No 65 Ry , dated the 19th August 1904, from the Secretary of State for India

RISOLUTION —The Government of India have had under consideration the recommendations made in his Report on the Administration and Working of Indian Railways by Mr Thomas Robertson, C V O , Special Commissioner for Indian Railways, with regard to the constitution of a Railway Board to control the railway system in India and its extensions, in place of the Public Works Department, Railway Branch, of the Government of India

2 The conception of a Railway Board is not new, it has been advocated and considered on various occasions for many years past Its central idea is that there should be a body of practical business men entrusted with full authority to manage the railways of India on commercial principles, and freed from all non-essential restrictions, or needlessly inflexible rules In view of the great expansion that has taken place in the railway system of India, and of the necessity which has in consequence arisen for providing more powerful and efficient machinery for the rapid disposal of the increasing business, the Government of India placed before His Majesty's Secretary of State for India certain proposals for the constitution of a Railway Board, which, with some modifications, have now received his sanction

3 There are two distinct classes of duties with which the new authority will have to deal The first is deliberative and includes the preparation of the railway programme and the greater questions of railway policy and finance affecting all lines The ultimate decision on such questions must of necessity rest with the Government of India

The second class of duties is administrative, and includes such matters as the construction of new lines by State Agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, and the settlement of disputes between railways It is in respect to these duties that the greatest advantage in the establishment of an authority outside the Government of India is looked for

4 The Railway Branch of the Public Works Department of the Government of India will be abolished, and the control of the railway system in India

APPENDIX 41—*concl'd*

is hereby entrusted to a Railway Board consisting of three persons—a Chairman and two Members. In the Chairman of the Board is vested the general control of all questions committed to the Railway Board, and the power to act on his own responsibility, subject to the confirmation of the Board. The Railway Board are also authorised to delegate to the Chairman or a Member the power of settling questions which may arise on any tour of inspection, such decision to be recorded subsequently as an act of the Railway Board.

5 The Railway Board will be provided with a Secretary and such establishment as may be considered necessary for the conduct of their business. All correspondence hitherto addressed to the Secretary, Public Works Department, Railway Branch, Government of India, and to the Directors of Railway Traffic and Construction, will in future be addressed to the Secretary to the Railway Board. Communications from public bodies interested in railway questions should also be addressed to the Board, either direct or through the Local Government concerned.

6 The Government of India desire that all orders which the Railway Board may issue shall be accepted as the orders of the Government of India. Separate orders will issue investing the Railway Board with certain of the functions of the Governor-General in Council under the Indian Railways Act (IX of 1890), as soon as the necessary legislation has been carried out. The responsibility of acting in accordance with the policy desired by the Government of India, rests with the Board and their advisers.

7 The head-quarters of the Railway Board will be at the head quarters for the time being of the Government of India.

ORDER—Ordered that

The Governments of Madras and Bombay, Public Works Department, General and Railway Branches

The Governments of Bengal the United Provinces of Agra and Oudh, and the Punjab, Public Works Department

The Government of Burma, Public Works Department, General and Railway Branches

The Honourable the Chief Commissioners of the Central Provinces and Assam
The Chief Commissioner of Coorg

The Honourable the Resident at Hyderabad

The Honourable the Agents to the Governor General for Central India, Rajputana and Baluchistan

The Honourable the Agent to the Governor General and Chief Commissioner, North West Frontier Province

The Accountant General, Public Works Department

The Director General of Military Works

The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Assam

The Director General of Telegraphs

The Managers, North Western, Oudh and Rohilkhand, and Eastern Bengal State railways

The Engineers in Chief, Ganges Bridge and Agra Delhi Chord railway

The Engineer in Chief, Murshidabad Branch, Eastern Bengal State railway

The Engineer in Chief, Nagda Muttra railway survey

this Resolution be communicated to all the Departments of the Government of India, and to the Local Governments, Administrations and Officers, noted on the margin. Also that it be published in the *Gazette of India*.

APPENDIX 42

Amendment in rule 3 of Chapter III, Part I, of the General Rules for working open lines of railway

CIRCULAR NO. R T 62.

RAILWAY BOARD

*Simla, the 1st June 1905***READ—**

Section 47 of the Indian Railways Act, 1890 (IX of 1890)

Government of India, Public Works Department notification No 118, dated the 21st March 1895, and the Government of India circular No 6 Railway, dated the 12th March 1895, published thereunder

Government of India, Department of Revenue and Agriculture memorandum No 436-71-17, dated the 21st February 1905

Government of India, Department of Commerce and Industry notification No. 801, dated the 24th March 1905

Railway Board's letter No R T 62, dated the 20th April 1905

RESOLUTION

The Government of India having decided, after consulting the several Railway Administrations, to introduce upon all railways (other than local disconnected lines where the change would be inconvenient) and in all telegraph offices, a Standard time which will in India be exactly $5\frac{1}{2}$ hours in advance of Greenwich and 9 minutes in advance of Madras time and in Burma $6\frac{1}{2}$ hours ahead of Greenwich and 5 minutes 23 seconds earlier than present Rangoon time, the necessary instructions were issued to all Railway Administrations concerned to introduce the Standard time at midnight between the 30th June and the 1st July 1905. This has necessitated an amendment of rule 3 of Chapter III, Part I, General Rules for working open lines of railway in India, which prescribes the use of Madras time

2 In exercise of the powers conferred by the notification of the Government of India in the Department of Commerce and Industry, No 801, dated the 24th March 1905, read in the preamble above, the Railway Board are pleased, under section 47, sub section (4) of the Indian Railways Act 1890 (IX of 1890), as in force in British India or as locally applied, to sanction the adoption on and from the 1st July 1905 by the Administrations of the Railways concerned, whether in British India, in foreign territory or in Native States, to which the General Rules for working open lines of railway, promulgated with the Government of India circular No 6 Railway, dated the 12th March 1895, apply of the accompanying amendment in rule 3 of Chapter III, Part I, of the said General Rules

Order—Ordered that this circular, with its enclosure, be published under a notification in Part I of the *Gazette of India* as required by section 47, sub-section (3), of the Indian Railways Act, 1890 (IX of 1890), and that a copy

APPENDIX 42—*concl.*

thereof be kept open for inspection at railway stations as directed by sub-section (6) of the same section, also that a copy of this circular and of its enclosure be

The Government of Madras, Bombay and Burma, Public Works Department, Railways Branch

The Government of Bengal, Public Works and Marine Departments

The Honourable the Chief Commissioner of Assam

The Honourable the Resident at Hyderabad.

The Honourable the Agent to the Governor General for Rajputana

The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Assam

The Managers, North Western, Oudh and Rohilkhand and Eastern Bengal (State) Railways General and Chief Commissioner of the North-West Frontier Province, and the Accountant General, Public Works Department, for information.

Document accompanying

Corrigendum referred to

Enclosure to Railway Board's circular No. R. T 62, dated the 1st June 1905.

Amendment in rule 3 of Chapter III, Part I, of the General Rules for working open lines of railway, promulgated with the Government of India, Public Works Department circular No. 6 Railway, dated the 12th March 1895.

In rule 3 of Part I, for the words "Madras time," read "Standard time."

APPENDIX 43

Proposals relating to projects for new railways or extensions of existing railways.

No. R C 313

RAILWAY BOARD

To

THE GOVERNMENTS OF MADRAS AND BOMBAY, PUBLIC WORKS DEPARTMENT, RAILWAY
- BRANCH

THE GOVERNMENTS OF BENGAI, THE UNITED PROVINCES OF AGRA AND OUDH, AND THE
PUNJAB, PUBLIC WORKS DEPARTMENT

THE GOVERNMENT OF BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH

THE HONOURABLE THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES AND
ASSAM

THE HONOURABLE THE RESIDENT AT HYDERABAD

THE HONOURABLE THE RESIDENT IN MYSORE

THE HONOURABLE THE AGENTS TO THE GOVERNOR-GENERAL FOR CENTRAL INDIA,
RAJPUTANA AND BALUCHISTAN

THE HONOURABLE THE AGENT TO THE GOVERNOR-GENERAL AND CHIEF COMMISSIONER,
NORTH-WEST FRONTIER PROVINCE

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA,
LUCKNOW AND ASSAM

THE MANAGERS, NORTH WESTERN, OUDH AND ROHILKHAND, AND EASTERN BENGAL
STATE RAILWAYS

Simla, the 23rd June 1905

SIR,

I am directed to say that the Railway Board would be glad if Local Governments would, at any time, send forward proposals relating to projects for new railways, or extensions of existing railways, which they may consider to be desirable in the interests of the various Provinces. It is suggested that the Local Governments should enter into direct consultation with the Railway Administrations likely to be affected by the construction of the lines which may be proposed.

APPENDIX 44

Revised form of agreement for extensions of railways into private premises.

No R T 3⁵

RAILWAY BOARD

To

- (i) THE MANAGER, NORTH WESTERN RAILWAY
- (ii) " " OUDH AND ROHILKHAND RAILWAY
- (iii) " " EASTERN BENGAL STATE RAILWAY

Simla, the 28th July 1905

SIR,

With reference to correspondence ending with ^{(i) and (ii) Government of India Public Works Department letter No 989 P.T. dated the 23rd October 1900} ^{(iii) Railway Board's letters Nos 181 B.T and 1 T 3, dated respectively the 2nd March and 5th June 1905}, I am directed to request you to substitute the accompanying form for that now in use for extensions of the railway into private premises

2 I am to add that the revised form is intended as a guide and that the Railway Board will be pleased to consider any modification of the terms necessary to meet particular cases

Document accompanying.

Revised form of agreement referred to

No R T 3⁵, dated Simla, the 28th July 1905

Copy, with copy of the enclosure referred to, forwarded to the Local

Governments and Administrations and to the officers noted on the margin, for information and guidance, with reference to correspondence ending with

(i) to (iii) The Secretaries to the Governments of Madras, Bombay and Baroda, Public Works Department, Railway Branch

(iv) The Secretary to the Government of Bengal, Public Works Department

(v) The Honourable the Chief Commissioner of Assam

(vi) The Honourable the Resident at Hyderabad

(vii) The Honourable the Agent to the Governor General for Rajputana

(viii) to (x) The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Assam

(i) to (vii) and (ix) and (x) Government of India Public Works Department letter No 989 P.T. dated the 23rd October 1902

(viii) Government of India Public Works Department, letter No 180

R.C. dated the 15th August 1904

and with the remark that the revised form of agreement now approved for State Railways may be taken as a general guide in preparing similar agreements

2 Should any modification of the terms be considered desirable, recommendations to meet the requirements of particular cases will receive the consideration of the Railway Board

APPENDIX 44—*contd*

STATE RAILWAY

*Revised form of Agreement approved by the Railway Board for Extensions of
the State Railway into private premises*

The Railway Administration will undertake the survey, construction and equipment of sidings leading from the main line, the sidings or stations of the railway for the traffic from Mills or other industries in the vicinity of the railway on the following conditions —

Survey and Construction

1. On the application and signature of the form of acceptance at the foot of these conditions, by the owners of a Mill or other industry (throughout these conditions referred to as the applicants) and on payment by them in advance of Rs 200 for the first mile or part of a mile of siding required and Rs 50 for every quarter mile or fraction thereof in excess of one mile, a survey for the siding to be constructed will be made by the Railway Administration. The above charge will cover the cost of preparation of the necessary plans and estimates, single copies of which will be sent to the applicants on completion. Applicants who require alterations to the plans which involve more survey work will have to pay as for a fresh survey.

2. Plans and estimates for the siding, in which shall be included the estimate of the cost of the acquisition of the land, will be subject to the sanction of the Railway Board, which sanction will be applied for by the Railway Administration as soon as the applicants have complied with the requirement of the 4th condition as to the amount to be deposited.

3. The land required for the siding outside the railway boundaries will be acquired by Government under the Land Acquisition Act. Land so acquired will vest absolutely in Government and the applicants will have no right or claim thereto.

4. On receipt of a statement of the advance required by the Railway Board to be made for such purposes as they may think necessary, including the estimated cost of acquisition of the land by Government, the applicants will deposit the amount thereof with the Railway Administration, and the Railway Administration will, on the plans and estimates for the siding being sanctioned by the Railway Board, proceed to the acquisition of the land. If the amount expended by the Railway Administration for the purposes mentioned in the said statement shall exceed the amount of the deposit by the applicants under this condition, the applicants will pay the Railway Administration on demand the amount of such excess.

5. The work to subgrade of the siding, that is, earthwork, bridging, ballast, etc., will be carried out at the expense of the applicants, but may, with the sanction of the Railway Administration, if so desired, be done by the applicants. Such work, if done by the applicants, shall be in accordance with the plans and specifications prepared by the Railway Administration and shall be approved by the Engineer of the Railway Administration before the rails are laid. Should the applicants, on undertaking to do the work, require the help of the staff of the Railway Administration in surveying or setting out the earthwork, etc., a charge of Rs 32 will be made for each day or part of a day that the staff is so employed. If the subgrade work is carried out by the Railway Administration the applicants shall deposit beforehand the estimated cost of it, including a charge for supervision at 17 per cent on the total amount of the estimate, excluding all stores issued from stock and freight charges on the same—stores issued from stock will be charged at the booked rates, as shown in the railway priced ledgers, plus a sum of 10 per cent for stores supervision—and agree to pay on demand any excess expenditure over the estimate that may be incurred by the Railway Administration in the actual execution of the work.

APPENDIX 44—*contd.**Maintenance of the siding*

6 The ordinary maintenance of all work to subgrade shall be done by, or at the expense of, the applicants, the supervision by the Railway Administration, where required, being paid for as provided in clause 5. Such emergent maintenance as the safety of the lines worked over by the railway demands will be done, as required by the Railway Administration, and the applicants agree by the acceptance of these terms to pay on demand any expenditure incurred by or through the Railway Administration on this account.

7 On completion, to the satisfaction of the Railway Administration, of the subgrade work, including provision of ballast, the permanent way materials, that is, sleepers, rails, fastenings, points and crossings will be provided, laid and maintained by the Railway Administration free of charge. The Railway Administration will further provide free of charge the girder work of bridges and any station machinery necessary.

8 In the event of the applicants abandoning the use of the siding, or in the event of the traffic to and from the siding being at any time in the opinion of the Railway Board insufficient to justify the continuance of the siding as such, the Railway Administration will be at liberty on giving to the applicants 30 days' notice to remove the permanent-way materials and all girder work and machinery provided by the Railway Administration from the siding, provided that if the applicants shall be desirous of keeping the siding open for traffic, and shall intimate their desire to the Railway Administration before the removal of the permanent-way materials, girder work or machinery shall have commenced, the Railway Administration will continue to so maintain the siding on condition that the applicants pay half-yearly any expense entailed on the Railway Administration by the siding being so kept open. If the permanent-way materials or the girder work or station machinery or any portion thereof shall be removed by the Railway Administration in exercise of the liberty reserved in this condition, the cost of such removal will be borne by the applicants and be paid by them to the Railway Administration on demand.

9 The Railway Board may at any time construct or permit the construction of any branch or extension of the siding, and may work traffic over the siding to and from such branch or extension. The Railway Board may sanction the use of the siding for the traffic of persons other than the applicants on payment to the applicants of a remuneration for such use, the amount of such remuneration to be determined by the Railway Administration. The working of such branch or extension, and the use of the siding by persons other than the applicants will be so conducted as to interfere as little as possible with the free use of the siding by the applicants, whose traffic shall have precedence.

10 If it shall become necessary to extend the siding beyond the land acquired by Government into the premises of the applicants, such extension will be constructed by the applicants in accordance in all respects with plans approved by the Railway Administration, and at the cost of the applicants. The entire cost of working such extension will be borne and paid by the applicants, and all property of the Railway Administration, while on such extension, will be at the entire risk of the applicants. If desired by the applicants, the Railway Administration will undertake to supply all labour for the maintenance of those portions of the siding situated within the premises of the applicants for a monthly payment by the applicants to the Railway Administration of Rupees 32 per mile of siding maintained, subject to a minimum charge as for half a mile. For lengths over half a mile, the charges will be as for $\frac{3}{4}$, 1, $1\frac{1}{4}$ miles, etc., increasing by $\frac{1}{4}$ mile increments. Materials required for such renewals, as may be necessary on the portion so maintained, will be supplied by the Railway and charged to the applicants at the rates shown in the Railway priced ledgers *plus* a sum of 10 per cent for stores supervision. All unserviceable material removed from portions of the siding so maintained shall be handed over to the applicants. In the case of sidings constructed throughout at the cost of applicants under clause 5, the same scale of charges will apply to the maintenance of the siding by the Railway.

APPENDIX 44—*contd*

11 If so desired by the Railway Administration, a weigh-bridge and weigh-bridge siding shall be provided. Such weigh-bridge siding will be constructed by the Railway Administration or by the applicants, as the case may be, upon and in accordance with the foregoing conditions governing the construction of the original siding, and on completion of the works of the siding up to subgrading, the weigh-bridge and the permanent-way materials necessary for such siding will be provided, laid and maintained by the Railway Administration. If for the purpose of constructing such weigh-bridge and siding any land outside the boundaries beyond that acquired by Government for the original siding shall be required the foregoing conditions regarding the acquisition of land for the original siding shall apply to the acquisition of such additional land.

12 If a weigh-bridge or weigh-bridge siding shall be constructed, the applicants will provide quarters for a weigh-clerk, and all labour from time to time necessary for the proper performance of the operation of weighing within the free time allowed for the use of wagons. The weigh-clerk will be a servant of, and paid by, the Railway Administration.

13 In the event of its being necessary, subsequent to the original construction of the sidings, to make any alterations or additions thereto, or to provide such items as fencing, signals or improved safety appliances, or machinery of any kind, or to provide quarters for signallers or staff for the working of the siding, such additional works shall be provided, subject to the general conditions governing the original construction, that is, the cost and maintenance of works to subgrade, or of works that would be abandoned if the siding were closed, shall be borne by the applicants and the cost of permanent-way materials, station machinery, signals and such items of works, supplied at the cost of the Railway Administration as would be removed by the Railway Administration in the event of the siding being abandoned, shall be borne by the Railway Administration. No addition or alteration shall be made to the siding by the applicants without the written sanction of the Railway Administration, nor without such sanction shall any temporary or permanent structure be erected by the applicants in such proximity to the siding as to effect in any way the working of trains over the siding. All sanctioned additions or alterations to the siding made by the applicants, and all sanctioned structures erected by the applicants shall be made or erected in all respects in compliance with the regulations of the Railway Administration for the time being in force.

14 All sums, which under the foregoing conditions shall be payable by the applicants on demand, shall if not so paid bear interest at 10 per cent per annum from date on which payment was demanded.

Traffic Working

15 Freight for all classes of goods, up to and from the station at which the siding takes off, will be charged in accordance with the rates from time to time published in the goods tariff of the Railway Administration and, in addition, for hauling loaded wagons over the siding to or from the Mills, the following charges will be made by the Railway, the distance for charge in all cases being for a minimum of 1 mile—

O 25 pie per maund per mile for jute, with the usual discount for bales

Classified rates as notified in the tariff for all other articles, including coal and coke or patent fuel

No charge will be made for hauling empty wagons over the siding

16 Wagons are to be made over at the Mills, and returned by the Mills in the form of certificate shown in Annexure A

17 Wagons will be hauled by the Railway to and from the Mill gates, or some other point fixed upon by the mutual consent of the applicants and

APPENDIX 44—*contd*

the Railway Administration, the former undertaking to shunt the wagons from there to the Mill premises and back

18 The applicants will see that the rules and regulations of the Railway Administration are strictly adhered to by their employés, and will be responsible for all accidents or loss or damage that may ensue from the neglect or disobedience of such rules and regulations by the employés. It will be the duty of the applicants to obtain all such rules, and to see that their employés are made acquainted with them

19 As soon as the wagons are placed at the Mill gates, or any other point mutually agreed upon, the station master will, after filling up Parts I and II of Annexure A, have Part I signed by the consignee, and himself sign Part II, and make it over to the consignee with Part III, when they will be considered as made over to the Mills, and from that time the free time allowed to them will commence, similarly, the wagons will be considered as returned to the Railway Administration as soon as they are placed at the Mill gates, or some other appointed place, after being unloaded which will be intimated to the station master by the consignee on Part III of Annexure A, which will be filled up by the latter, and signed both by consignee and station master in each other's presence

20 The applicants will be held responsible for any damages which the wagons may sustain during the period they remain under their charge, and will be liable for the cost of re-railing wagons derailed on portions of the siding maintained by them and for repairs to the siding

21 The free time allowed to the applicants on wagons and the demurrage charges leviable will be governed by the rules issued from time to time in the Goods Tariff book of the Railway Administration

22 No traffic other than that which may properly be connected with the working or requirements of the Mill or industry of the applicants, shall, except with the written permission of the Railway Administration, be at any time taken or sent by the applicants over the siding. No consideration or remuneration of any nature, except such as may be contained in a written permission of the Railway Administration shall be received or taken by the applicants in respect of traffic over the siding

To THE MANAGER,

State Railway

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DEAR SIR,

We accept the above terms for the construction, working and maintenance of the siding asked for by us.

at mile _____ on the _____ of the _____ State Railway.

Dated _____ 190

ANNEXURE A.

S Ry — Voucher for consignments unloaded in private sidings S Ry — Voucher for consignments unloaded in private sidings.

private sidings loaded in private sidings

CHAPTER

OFFICER COBY

Station _____
Date _____
Hour _____

Station Master _____ Consignee _____ Date _____

Station Master

Consignee _____ Consignee _____

Date _____ Date _____ Date _____

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S Ry — Voucher for consignments unloaded in private sidings

loaded in private sidings

Digitized by

Caucasian Notices

Station _____ Railway Receipt
Date _____ Consignee _____
Hour _____

Wagon Nos	ARRIVED Date-	PLACED		REMARKS
		Hour	Date	

Consignee _____ Consignor _____

Conscience

Date _____ Date _____

Date _____

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APPENDIX 44—*concl'd*

PART III
CONSIGNER'S CERTIFICATE AND REMITTANCE

PAPERS III

CONSIGNEE'S CERTIFICATE AND BILL OF LADING

Station _____ Date _____
 Receipt No. _____ Hour _____

Wagon Nos	RELEASED		TIME ALLOWED		TIME TAKEN		REMARKS
	Date	Hour	Date	Hour	Date	Hour	

Consignee _____ Consignor _____

Conscience

Date _____ Date _____

Date _____

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APPENDIX 45.

Rates and conditions for the carriage of coal for the general public
and for State or other Railways.

Circular No R T 29.

RAILWAY BOARD.

RAILWAY TRAFFIC

To

THE SECRETARIES TO THE GOVERNMENTS OF MADRAS, BOMBAY AND BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH
THE SECRETARY TO THE GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT
THE SECRETARY TO THE GOVERNMENT OF BENGAL, MARINE DEPARTMENT
THE HONOURABLE THE CHIEF COMMISSIONER OF ASSAM
THE HONOURABLE THE RESIDENT AT HYDERABAD
THE HONOURABLE THE AGENT TO THE GOVERNOR GENERAL FOR RAJPUTANA
THE ACCOUNTANT GENERAL, PUBLIC WORKS DEPARTMENT
THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS,
CALCUTTA AND LUCKNOW
THE DIRECTOR GENERAL OF TELEGRAPHUS
THE MANAGER, NORTH WESTERN, OUDH AND ROHILKHAND AND EASTERN BENGAL
(STATE) RAILWAYS

Simla, the 26th August 1905

SIR,

In Government of India letter No 517 R T, dated the 8th July 1897, it was ruled that the rates quoted in the Schedules to Government of India Circular No 8 Railway, dated the 4th May 1895, were maximum rates, the minimum rate on railways for which a minimum has been prescribed, being $\frac{1}{10}$ th pie per maund per mile

2 The Railway Board consider that this minimum restricts trade in places distant from the coal-fields, and they accordingly authorise, subject to the conditions enumerated below, the adoption of the following minimum rates.—

	Per maund per mile
For distances up to 300 miles	$\frac{1}{10}$ th pie or 0 10
Plus for any distance in excess of 300 miles and up to 500 miles inclusive	$\frac{1}{10}$ th pie or 0 066
Plus for any distance in excess of 500 miles ..	$\frac{1}{10}$ th pie or 0 05

Condition 1—That the rate shall be calculated on the through distance between the station of origin and the station of destination of the consignment

Condition 2—That when there are two or more routes to destination from the colliery where the traffic originates the railway or railways forming the longer route may calculate charges on the same mileage as the railway or railways forming the shorter route

Condition 3—That coal for the use of foreign railways is charged at the same rates and under the same conditions as coal carried for the public

Condition 4—That the rates charged are divided between the railways over which the traffic is carried in proportion to the mileage of each, provided that if the distance the coal is carried over any railway is less than 25 miles, the mileage of that railway in dividing the freight shall be reckoned as 25 miles.

Condition 5—That these rates shall be subject to revision at the end of three years from the 1st of September 1905

APPENDIX 46.

Construction of wagon frames and bodies of wagons for State railways in India.

No R S 107-1

RAILWAY BOARD.

To

THE MANAGER, NORTH WESTERN RAILWAY

THE MANAGER, OUDH AND ROHILKHAND RAILWAY

THE MANAGER, EASTERN BENGAL RAILWAY

Dated Simla, the 11th September 1905

SIR,

I am directed to inform you that the Railway Board have received representations from various firms of Manufacturing Engineers in India, who ask that they may be given the opportunity of tendering for the construction of wagon frames and bodies in this country. After giving the matter their full consideration, the Railway Board have come to the conclusion that they are justified in placing Indian firms in a position to develop this class of work, and they desire that the arrangement indicated below shall be adopted and shall continue for a period of three years —

2 When sanction has been given to the purchase of goods stock, tenders shall be called for publicly in India for the supply of twenty-five per cent of the stock sanctioned

3 Tenders shall be confined to the supply of frames and bodies only. The requisite wheels, axles, springs and draw-bars to complete the wagons shall be indented for from England, and shall be supplied by the railway administration to the firm whose tender has been accepted

4 Tenders should be for wagons erected complete on rails

5 The firms tendering should bind themselves to deliver the wagons within a specified time

6 The work done and the material used shall be subject to the conditions laid down in Public Works Department Code, Volume II, Appendix 30, paragraph 7. Tenders shall be accepted only from firms whose names are entered in Schedule B attached to that Appendix, as corrected from time to time by order of the Government of India, and the work shall be subject to the specifications and tests prescribed in Schedule C attached to that appendix, and to the same kind of inspection as that provided for in tenders for similar work called for in England

7 Subject to the material being satisfactory, iron and steel of Indian manufacture should be used whenever possible

8 Tenders should be submitted by Managers to the Railway Board for approval before acceptance